L Number	Hits	Search Text	DB	Time stamp
1	1	"5958897" .pn.	USPAT; US-PGPUB	2002/10/01 16:25
2	2060	(uridine or thiouridine or 4-thiouridine) and (inflammation or asthma or crohn or colitits or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)	USPAT; US-PGPUB	2002/10/01 16:27
3	2087	(uridine or thiouridine or 4-thiouridine) and (inflammation or asthma or crohn or colitis or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)	USPAT; US-PGPUB	2002/10/01 16:29
4	343	(514/49).ccls.	USPAT; US-PGPUB	2002/10/01 16:27
5	46	((uridine or thiouridine or 4-thiouridine) and (inflammation or asthma or crohn or colitis or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)) and ((514/49).ccls.)	USPAT; US-PGPUB	2002/10/01 16:27
6	453	(thiouridine or 4-thiouridine) and (inflammation or asthma or crohn or colitis or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)	USPAT; US-PGPUB	2002/10/01 16:29
7	5	(((uridine or thiouridine or 4-thiouridine) and (inflammation or asthma or crohn or colitis or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)) and ((514/49).ccls.)) and ((thiouridine or 4-thiouridine) and (inflammation or asthma or crohn or colitis or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea))	USPAT; US-PGPUB	2002/10/01 16:30
-	5627	uridine or 4-thiouridine or thiouridine isomaltitol	USPAT; US-PGPUB	2002/10/01 11:43
-	49908	inflammation or inflammatory	USPAT; US-PGPUB	2002/10/01 11:34
-	23845	heomostasis or (blood adj disorder) or platelet	USPAT; US-PGPUB	2002/10/01 11:34
-	821	(uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)	USPAT; US-PGPUB	2002/10/01 11:34
-	1773	(uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory)	USPAT; US-PGPUB	2002/10/01 11:34
-	532	((uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)) and ((uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory))	USPAT; US-PGPUB	2002/10/01 11:35
-	442	(((uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)) and ((uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory))) and bacteria	USPAT; US-PGPUB	2002/10/01 11:35
-	467	(((uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)) and ((uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory))) and bacterial	USPAT; US-PGPUB	2002/10/01 11:36

-	383	((((uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)) and ((uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory))) and bacterial) and (asthma or crohn or colitits or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)	USPAT; US-PGPUB	2002/10/01 11:43
-	404	(514/50).ccls.	USPAT; US-PGPUB	2002/10/01 11:39
-	5518	uridine or 4-thiouridine or thiouridine	USPAT; US-PGPUB	2002/10/01 11:43
-	110	isomaltitol	USPAT; US-PGPUB	2002/10/01 11:42
-	1202	(514/23).ccls.	USPAT; US-PGPUB	2002/10/01 11:42
-	1	((514/23).ccls.) and isomaltitol	USPAT; US-PGPUB	2002/10/01 11:42
-	5	isomaltitol and (inflammation or inflammatory)	USPAT; US-PGPUB	2002/10/01 11:42
-	1682	(uridine or 4-thiouridine or thiouridine) and (asthma or crohn or colitits or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)	USPAT; US-PGPUB	2002/10/01 11:44
-	2	isomaltitol and (asthma or crohn or colitits or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)	USPAT; US-PGPUB	2002/10/01 11:43
-	113858	bacteria or bacterial	USPAT; US-PGPUB	2002/10/01 11:45
-	264	((uridine or 4-thiouridine or thiouridine) and (asthma or crohn or colitits or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)) not (bacteria or bacterial)	USPAT; US-PGPUB	2002/10/01 11:45
-	1	"5691320" .pn.	USPAT; US-PGPUB	2002/10/01 15:55
-	24	palatinitol	USPAT; US-PGPUB	2002/10/01 16:02
-	343	(514/49).ccls.	USPAT; US-PGPUB	2002/10/01 16:02
-	226	((514/49).ccls.) and (inflammation or inflammatory or asthma or psoriasis or cancer or rhematoidal or arthritis or conronary)	USPAT; US-PGPUB	2002/10/01 16:03
-	86	(((514/49).ccls.) and (inflammation or inflammatory or asthma or psoriasis or cancer or rhematoidal or arthritis or conronary)) and (uridine or thiouridine)	USPAT; US-PGPUB	2002/10/01 16:03

L Number	Hits	Search Text	DB	Time stamp
-	5627	uridine or 4-thiouridine or thiouridine isomaltitol	USPAT; US-PGPUB	2002/10/01 11:43
-	49908	inflammation or inflammatory	USPAT; US-PGPUB	2002/10/01 11:34
-	23845	heomostasis or (blood adj disorder) or platelet	USPAT; US-PGPUB	2002/10/01 11:34
-	821	(uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)	USPAT; US-PGPUB	2002/10/01 11:34
-	1773	(uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory)	USPAT; US-PGPUB	2002/10/01 11:34
-	532	((uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)) and ((uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory))	USPAT; US-PGPUB	2002/10/01 11:35
-	442	(((uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)) and ((uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory))) and bacteria	USPAT; US-PGPUB	2002/10/01 11:35
-	467	(((uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)) and ((uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory))) and bacterial	USPAT; US-PGPUB	2002/10/01 11:36
-	383	((((uridine or 4-thiouridine or thiouridine isomaltitol) and (heomostasis or (blood adj disorder) or platelet)) and ((uridine or 4-thiouridine or thiouridine isomaltitol) and (inflammation or inflammatory))) and bacterial) and (asthma or crohn or colitits or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)	USPAT; US-PGPUB	2002/10/01 11:43
-	404	(514/50).ccls.	USPAT; US-PGPUB	2002/10/01 11:39
-	5518	uridine or 4-thiouridine or thiouridine	USPAT; US-PGPUB	2002/10/01 11:43
-	110	isomaltitol	USPAT; US-PGPUB	2002/10/01 11:42
-	1202	(514/23).ccls.	USPAT; US-PGPUB	2002/10/01 11:42
-	1	((514/23).ccls.) and isomaltitol	USPAT; US-PGPUB	2002/10/01 11:42
-	5	isomaltitol and (inflammation or inflammatory)	USPAT; US-PGPUB	2002/10/01 11:42
-	1682	(uridine or 4-thiouridine or thiouridine) and (asthma or crohn or colitits or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)	USPAT; US-PGPUB	2002/10/01 11:44
-	2	isomaltitol and (asthma or crohn or colitits or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)	USPAT; US-PGPUB	2002/10/01 11:43
-	113858	bacteria or bacterial	USPAT; US-PGPUB	2002/10/01 11:45
-	264	((uridine or 4-thiouridine or thiouridine) and (asthma or crohn or colitits or arteriosclerosis or restenosis or coronary or diabetes or rheumatoidal or psoriasis or seborrhea)) not (bacteria or bacterial)	USPAT; US-PGPUB	2002/10/01 11:45

SION NUMBER: 2001510719 MEDLINE
DOCUMENT NUMBER: 21442560 PubMed ID: 11558827
TITLE: New and emerging therapies for pulmonary complications of cystic fibrosis.
AUTHOR: Tonelli M R; Aitken M L
CORPORATE SOURCE: Department of Medicine, University of Washington, Seattle, USA.. tonelli@u.washington.edu
SOURCE: DRUGS, (2001) 61 (10) 1379-85. Ref: 40
Journal code: 7600076. ISSN: 0012-6667.
PUB. COUNTRY: New Zealand
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200201
ENTRY DATE: Entered STN: 20010918
Last Updated on STN: 20020128
Entered Medline: 20020123

AB In the decade since the gene for cystic fibrosis (CF) was discovered, research into potential therapeutic interventions has progressed on a number of different fronts. The vast majority of morbidity and mortality in CF results from inflammation and infection of the airways. Direct delivery of antibacterials to the airway secretions via a nebuliser is an attractive therapeutic option, and a novel formulation of tobramycin designed for such a purpose has been demonstrated to improve spirometry and decrease the need for intravenous antibacterials. In addition, early clinical trials are studying the effects of small peptides with antibiotic properties (defensins) delivered directly to the airways. Inflammation, whether secondary to infection or an independent feature of CF, leads to progressive bronchiectasis. Anti-inflammatories such as prednisone and possibly ibuprofen have been shown to decrease the rate of respiratory decline in patients with CF but have tolerability profiles that limit clinical usefulness. Macrolides also have anti-inflammatory properties and clinical trials are now ongoing to assess the efficacy of these agents in CF. Multiple agents, including **uridine** triphosphate (UTP), genistein, phenylbutyrate and CPX (cyclopentyl dipropylxanthine), have been demonstrated in cell culture to at least partially correct the primary defect of ion transport related to mutations in the cystic fibrosis transmembrane conductance regulator (CFTR). No agent of this class has yet demonstrated clinical effectiveness, but several are in preclinical and early clinical trials. Finally, gene therapy that allows for the incorporation and expression of wild-type CFTR in respiratory epithelial cells would be definitive therapy for CF. However, multiple barriers to delivery and expression need to be overcome. With research proceeding on these multiple fronts, new therapies for pulmonary complications promise to continue to increase the life expectancy of individuals with CF.

L30 ANSWER 29 OF 115 MEDLINE
ACCESSION NUMBER: 2000135690 MEDLINE
DOCUMENT NUMBER: 20135690 PubMed ID: 10673135
TITLE: Effects of interleukin-1 blockers on corneal fibroblast proliferation in vitro and ocular inflammation in vivo.
AUTHOR: Liu Q; Zhou Y H; Xuan B; Chiou G C; Okawara T
CORPORATE SOURCE: Institute of Ocular Pharmacology and Department of Medical Pharmacology and Toxicology, Texas A&M University System Health Science Center, College Station 77843-1114, USA.
SOURCE: JOURNAL OF OCULAR PHARMACOLOGY AND THERAPEUTICS, (2000 Feb) 16 (1) 81-96.
Journal code: 9511091. ISSN: 1080-7683.
PUB. COUNTRY: United States

ACCESSION NUMBER: 84187324 MEDLINE
DOCUMENT NUMBER: 84187324 PubMed ID: 6425443
TITLE: Functional resistance of inflammatory macrophages to methotrexate in vitro.
AUTHOR: Zeller J M; Gudewicz P W
CONTRACT NUMBER: NU-5326 (BHP)
SOURCE: JOURNAL OF LEUKOCYTE BIOLOGY, (1984 May) 35 (5) 475-87. Journal code: 8405628. ISSN: 0741-5400.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198406
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19970203
Entered Medline: 19840606

AB The purpose of this study was to evaluate the effects of high and low therapeutic doses of methotrexate (MTX) on macrophage metabolism and function in vitro. Monolayers of elicited rat peritoneal macrophages (PM) were exposed to a wide range of MTX concentrations (10(-8) M-10(-3) M) for 24 or 48 hr and macrophage RNA and protein metabolism were evaluated by the incorporation of [3H]5-**uridine** and [14C]1-leucine, respectively, into trichloroacetic acid (TCA)-precipitable material. Macrophage functional activity was examined by measuring the uptake of [14C]Pseudomonas aeruginosa to assess phagocytosis and the release of 51Cr from antibody-coated [51Cr]sheep red blood cells (SRBC) to assess antibody-dependent cell-mediated cytotoxicity. Following a 24-hr incubation with 10(-3) M MTX, incorporation of [3H]5-**uridine** into PM monolayers was enhanced 79% when compared to control monolayers (p less than 0.005). Washout studies revealed that the stimulation of **uridine** incorporation was no longer observed by 24 hr following the removal of MTX from the culture medium. Incubation with 10(-3) M MTX for 48 hr returned **uridine** incorporation to control levels, although leucine incorporation into protein was reduced by 22% (p less than 0.01). The depression in leucine incorporation in the presence of 10(-3) M MTX was not reversed after the removal of MTX from the culture medium. Uptake of [14C]P. aeruginosa was not altered following a 24- or 48-hr incubation with either 10(-7) M or 10(-3) M MTX. Similarly, [51Cr]SRBC cytolysis was not affected by a 2-hr preincubation with and continuous exposure to between 10(-8) M and 10(-3) M MTX. These results demonstrate that incubation of inflammatory macrophages with clinically high doses of MTX can alter macrophage RNA and protein metabolism without producing demonstrable changes in macrophage functional activity.

30 ANSWER 6 OF 115 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1999375605 EMBASE
TITLE: Potentiation of lipopolysaccharide-induced IL-6 release by **uridine** triphosphate in macrophages: Cross-interaction with cyclooxygenase-2- dependent prostaglandin E2 production.
AUTHOR: Chen B.C.; Lin W.W.
CORPORATE SOURCE: Dr. W.W. Lin, Department of Pharmacology, College of Medicine, National Taiwan University, Taipei, Taiwan,Province of China. wwl@ha.mc.ntu.edu.tw
SOURCE: Journal of Biomedical Science, (1999) 6/6 (425-432). Refs: 40
ISSN: 1021-7770 CODEN: JBCIEA
COUNTRY: Switzerland
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Our previous study has demonstrated the potentiation by **uridine** triphosphate (UTP) of nitric oxide (NO) and prostaglandin E2 (PGE2) production in lipopolysaccharide (LPS)-stimulated murine J774 macrophages. In this study, we found that the amount of interleukin-6 (IL-6) release in response to LPS stimulation was greatly enhanced in the presence of UTP. This enhancement exhibited concentration dependence and occurred after 8 h of treatment with LPS. RT-PCR analysis indicated that the steady-state level of IL-6 mRNA induced by LPS was apparently increased upon co-addition of UTP. The potentiation by UTP was inhibited by the treatment with U73122 (a phosphatidylinositol-phospholipase C inhibitor), BAPTA/AM (an intracellular Ca2+ chelator), KN-93 (a selective inhibitor of calmodulin-dependent protein kinase) or PDTC (a nuclear factor .kappa.B inhibitor). To understand the cross-regulation among NO, PGE2 and IL-6, all of which are dramatically induced after LPS stimulation, the effects of L-NAME (a nitric oxide synthase inhibitor), indomethacin (a cyclooxygenase inhibitor), NS-398 (a cycloxygenase-2 inhibitor) and IL-6 antibody were tested. The results revealed the positive regulation between PGE2 and IL-6 synthesis because NS- 398 and indomethacin inhibited LPS plus UTP-induced IL-6 release, and IL-6 antibody attenuated LPS plus UTP-induced PGE2 release. Taken together these results reinforce the role of UTP as a regulatory element in inflamed sites by demonstrating the capacity of this nucleotide to potentiate LPS-induced release of inflammatory mediators.

L30 ANSWER 7 OF 115 MEDLINE
ACCESSION NUMBER: 1999167905 MEDLINE
DOCUMENT NUMBER: 99167905 PubMed ID: 10068780
TITLE: Quantitative histochemical study of hyaluronic acid binding protein and the activity of **uridine** diphosphoglucose dehydrogenase in the synovium of patients with rheumatoid arthritis.
AUTHOR: Uzuki H; Watanabe T; Katsura Y; Sawai T
CORPORATE SOURCE: First Department of Pathology, Iwate Medical University, School of Medicine, Morioka, Japan.. muzuki@iwate-med.ac.jp
SOURCE: ANALYTICAL AND QUANTITATIVE CYTOLOGY AND HISTOLOGY, (1999 Feb) 21 (1) 75-80.
Journal code: 8506819. ISSN: 0884-6812.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199906
ENTRY DATE: Entered STN: 19990628

Last Updated on STN: 19990628
Entered Medline: 19990615

AB OBJECTIVE: To examine hyaluronic acid (HA) dynamics in synovia with rheumatoid arthritis (RA), relying on a new quantitative technique introduced into histochemistry. STUDY DESIGN: Synovial lesions from 28 patients were classified into four histologic stages of RA according to the degree of inflammation. The distribution of HA was histochemically investigated with a hyaluronic acid binding protein (HABP) and that of HA-producing cells enzyme histochemically with the expression of **uridine** diphosphoglucose dehydrogenase (UDPGD) activity in the synovium of RA patients. The results were quantified using an image processor for analytical pathology. The positive area of HABP reaction, the number of UDPGD-positive cells and the color density of the enzyme-histochemistry of UDPGD activity were measured with the IPAP system. RESULTS: HA was shown to be diffusely distributed in the synovia, particularly densely in the superficial layer, and the distribution overlapped with that of UDPGD activation. HA distribution and UDPGD activity varied with the severity of synovial inflammation, and the positive area was the most extensive in the early stage, while it completely disappeared in the fibrotic stage. CONCLUSION: We assume that for HA, not only does the production decrease, but the range of distribution contracts wit

L30 ANSWER 3 OF 115 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 92254139 EMBASE
DOCUMENT NUMBER: 1992254139
TITLE: **Uridine** diphosphoglucose dehydrogenase activity in synovial lining cells in the experimental antigen induced model of rheumatoid arthritis: An indication of synovial lining cell function.
AUTHOR: Pitsillides A.A.; Blake S.M.
CORPORATE SOURCE: Department of Rheumatology Research, Arthur Stanely House, Tottenham Street,London W1P 9PG, United Kingdom
SOURCE: Annals of the Rheumatic Diseases, (1992) 51/8 (992-995). ISSN: 0003-4967 CODEN: ARDIAO
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 031 Arthritis and Rheumatism
LANGUAGE: English
SUMMARY LANGUAGE: English

AB **Uridine** diphosphoglucose dehydrogenase (UDPGD) is the enzyme responsible for the production of **uridine** diphospho(UDP)-glucuronate, an essential monosaccharide in the biosynthesis of hyaluronan, which is found in high concentrations in normal synovial fluid. Synovial lining cells have been implicated in the synthesis of hyaluronan, but the degree to which they are adapted metabolically to this function in normal and inflamed synovium has not been established. Using a quantitative cytochemical method it was shown that synovial lining cells from chronically inflamed rabbit synovium had significantly lower UDPGD activity per cell than the lining cells of normal synovium. These findings suggest that the lining cells of normal non-inflamed synovium may be enzymatically adapted for the synthesis of hyaluronan and that this may be an indication of a specific role of synovial lining cells in the maintenance of normal joint function.

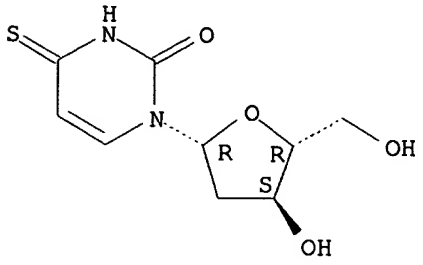
L30 ANSWER 4 OF 115 MEDLINE

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200003
ENTRY DATE: Entered STN: 20000314
Last Updated on STN: 20000314
Entered Medline: 20000302

AB The success of keratorefractive surgical procedures is limited by the wound healing process in the corneal stroma. The proliferation and matrix synthesis of corneal stromal fibroblasts is the central element of the wound healing process that is triggered by an initial inflammation. In order to develop new therapeutic strategies to reduce wound healing intensity, we investigated the effect of newly synthesized interleukin-1 (IL-1) blockers on the proliferation of cultured rabbit corneal fibroblasts and the ocular inflammation induced by IL-1. It was found that the addition of IL-1 blockers, such as CK-135 to CK-145, led to a dose-dependent inhibition of cell proliferation after 24, 48 and 72 hr of incubation. The isotope incorporation study showed that the syntheses ofDNA and mRNA were suppressed whereas that of protein was enhanced or unaffected. These compounds also demonstrated a potent anti-inflammation action in the rat uveitis model. Our results indicate that CK (Chiou-Kumamoto) compounds may be valuable therapeutic agents for the prevention of postoperative complications after corneal keratorefractive surgical procedures.

LC STN Files: BEILSTEIN*, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, MEDLINE, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

28 REFERENCES IN FILE CA (1962 TO DATE)
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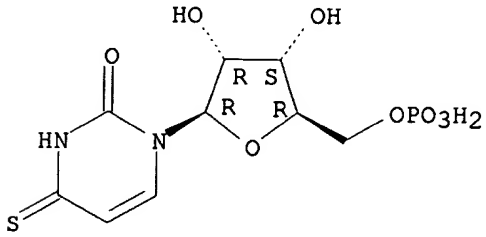
28 REFERENCES IN FILE CAPLUS (1962 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 48 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 4145-46-4 REGISTRY
CN 5'-Uridylic acid, 4-thio- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine, 4-thio-, 5'-(dihydrogen phosphate) (8CI)
CN Uridine, 4-thio-, 5'-phosphate (7CI)
OTHER NAMES:
CN 4-Thio-UMP
CN **4-Thiouridine 5'-monophosphate**
CN **4-Thiouridine 5'-phosphate**
CN 4-Thiouridylic acid
FS STEREOSEARCH
DR 21914-60-3
MF C9 H13 N2 O8 P S
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

47 REFERENCES IN FILE CA (1962 TO DATE)
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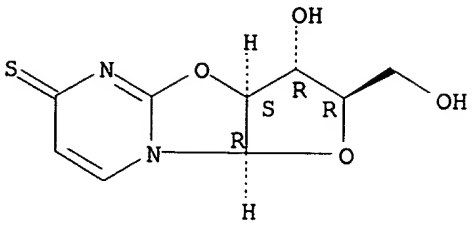
47 REFERENCES IN FILE CAPLUS (1962 TO DATE)

Absolute stereochemistry.

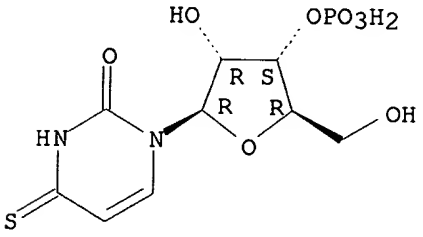


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 46 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 6814-92-2 REGISTRY
CN 3'-Uridylic acid, 4-thio- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine, 4-thio-, 3'-(dihydrogen phosphate) (8CI)
CN Uridine, 4-thio-, 3'-phosphate (7CI)
OTHER NAMES:
CN **4-Thiouridine 3'-phosphate**
FS STEREOSEARCH
MF C9 H13 N2 O8 P S
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)

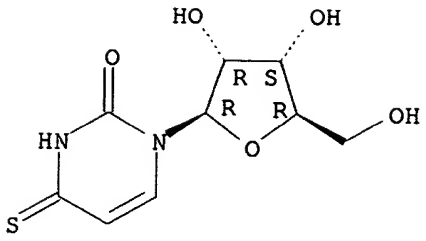
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 47 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 5580-20-1 REGISTRY
CN Uridine, 2'-deoxy-4-thio- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN **2'-Deoxy-4-thiouridine**
CN 4-Thio-2'-deoxyuridine
CN 4-Thiodeoxyuridine
FS STEREOSEARCH
MF C9 H12 N2 O4 S

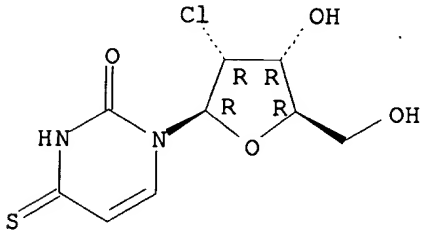


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

350 REFERENCES IN FILE CA (1962 TO DATE)
15 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
350 REFERENCES IN FILE CAPLUS (1962 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 44 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 10212-15-4 REGISTRY
CN Uridine, 2'-chloro-2'-deoxy-4-thio- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN **2'-Chloro-2'-Deoxy-4-thiouridine**
FS STEREOSEARCH
MF C9 H11 Cl N2 O4 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 45 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 10190-42-8 REGISTRY
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidine-6-thione, 2,3,3a,9a-tetrahydro-3-hydroxy-2-(hydroxymethyl)-, [2R-(2.alpha.,3.beta.,3a.beta.,9a.beta.)]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidine-6-thione, 2,3,3a,9a-tetrahydro-3-hydroxy-2-(hydroxymethyl)- (8CI)
CN Uracil, 2,2'-anhydro-1-.beta.-D-arabinofuranosyl-4-thio-
OTHER NAMES:
CN **2,2'-Anhydro-4-thiouridine**
FS STEREOSEARCH
DR 39687-05-3
MF C9 H10 N2 O4 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, SPECINFO, TOXCENTER
(*File contains numerically searchable property data)

L29 ANSWER 8 OF 57 MEDLINE
ACCESSION NUMBER: 2000177993 MEDLINE
DOCUMENT NUMBER: 20177993 PubMed ID: 10712415
TITLE: P2Y receptor regulation of PAI-1 expression in vascular smooth muscle cells.
AUTHOR: Bouchie J L; Chen H C; Carney R; Bagot J C; Wilden P A; Feener E P
CORPORATE SOURCE: Research Division, Joslin Diabetes Center, Harvard Medical School, Boston, MA 02215, USA.
CONTRACT NUMBER: DK-36836 (NIDDK)
DK-48358 (NIDDK)
SOURCE: ARTERIOSCLEROSIS, THROMBOSIS, AND VASCULAR BIOLOGY, (2000 Mar) 20 (3) 866-73.
Journal code: 9505803. ISSN: 1079-5642.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200005
ENTRY DATE: Entered STN: 20000525
Last Updated on STN: 20000525
Entered Medline: 20000518

AB P2Y-type purine and pyrimidine nucleotide receptors play important roles in the regulation of vascular **hemostasis**. In this article, the regulation of plasminogen activator inhibitor-1 (PAI-1) expression in rat aortic smooth muscle cells (RASMCs) by adenine and **uridine** nucleotides was examined and compared. Northern analysis revealed that RASMCs express multiple P2Y receptor subtypes, including P2Y(1), P2Y(2), and P2Y(6). Treatment of RASMCs with UTP increased PAI-1 mRNA expression and extracellular PAI-1 protein levels by 21-fold (P<0.001) and 7-fold (P<0.001), respectively. The ED(50) for the effect of UTP on PAI-1 expression was approximately 1 micromol/L, and its maximal effect occurred at 3 hours. UDP stimulated a 5-fold increase (P<0.005) in PAI-1 expression. In contrast to these potent stimulatory effects of **uridine** nucleotides, ATP and 2-methylthioadenosine triphosphate (2-MeSATP) caused a small and transient increase in PAI-1 mRNA at 1 hour, followed by a rapid decrease to baseline levels. ADP produced only an inhibitory effect, reducing PAI-1 mRNA levels by 63% (P<0.05) at 3 hours. The relative nucleotide potency in stimulating PAI-1 expression is UTP>UDP>ATP=2-MeSATP, consistent with a predominant role of the P2Y(6) receptor. Further studies revealed that exposure of RASMCs to either ATP or ADP for 3 hours inhibited both UTP- and angiotensin II-stimulated PAI-1 expression by up to 90% (P<0.001). Thus, ATP induced a small and transient upregulation of PAI-1 that was followed by a strong inhibition of PAI-1 expression. These results show that extracellular adenine and **uridine** nucleotides exert potent and opposing effects on vascular PAI-1 expression.

L30 ANSWER 30 OF 115 MEDLINE

ACCESSION NUMBER: 97438423 MEDLINE
DOCUMENT NUMBER: 97438423 PubMed ID: 9292911
TITLE: Implications of early inflammation and infection in cystic fibrosis: a review of new and potential interventions.
AUTHOR: Weller P H
CORPORATE SOURCE: Department of Respiratory Medicine and Cystic Fibrosis, Birmingham Children's Hospital, United Kingdom.
SOURCE: PEDIATRIC PULMONOLOGY, (1997 Aug) 24 (2) 143-5; discussion 159-61. Ref: 20
Journal code: 8510590. ISSN: 8755-6863.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199710
ENTRY DATE: Entered STN: 19971105
Last Updated on STN: 19971105
Entered Medline: 19971022

AB Airway infection and inflammation occur early in cystic fibrosis (CF) lung disease, suggesting the need for early treatment. Our current approach to routine management of CF includes a comprehensive, CF center-directed program that aims at maintaining normal nutrition and delaying the progression of lung disease. Regular secretion clearance, frequent antibiotics, and bronchodilators are commonly used. However, despite this early, aggressive comprehensive management, airway inflammation and infection progress. Several other recent approaches such as the use of corticosteroids and ibuprofen to decrease inflammation, as well as dornase alfa to thin secretions and improve pulmonary function, are under investigation in young children. Other potential treatments include amiloride/**uridine** triphosphate and hypertonic saline aerosol. Early treatment offers the promise of reducing morbidity as well as delaying the progression of later disease.

* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 12:35:34 ON 30 SEP 2002

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 12:35:40 ON 30 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 SEP 2002 HIGHEST RN 457047-85-7
DICTIONARY FILE UPDATES: 29 SEP 2002 HIGHEST RN 457047-85-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s 4-thiouridine
11645135 4
86 THIOURIDINE
L1 48 4-THIOURIDINE
(4(W)THIOURIDINE)

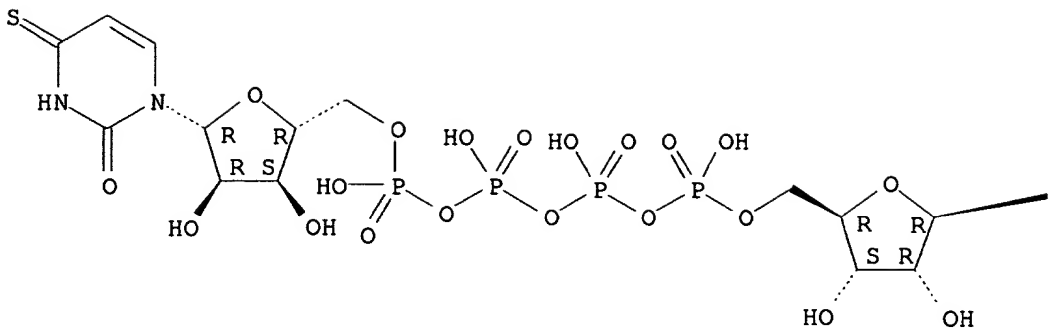
=> s isomaltitol
L2 2 ISOMALTITOL

=> d l1 1-48

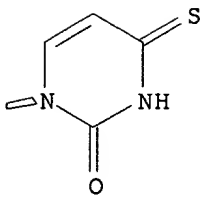
L1 ANSWER 1 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 211427-11-1 REGISTRY
CN **Uridine 5'-(pentahydrogen tetraphosphate), 4-thio-, P'''.fwdarw.5'-ester with 4-thiouridine (9CI)** (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H26 N4 O21 P4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

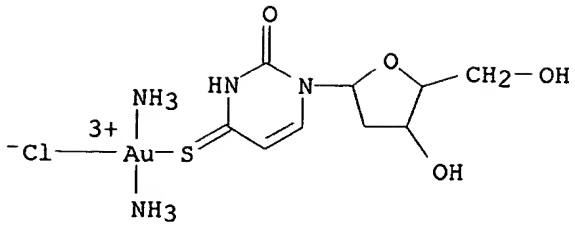
4 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 2 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 209209-48-3 REGISTRY
CN **RNA (synthetic tRNAPhe 4-thiouridine-substituted derivative) (9CI)** (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

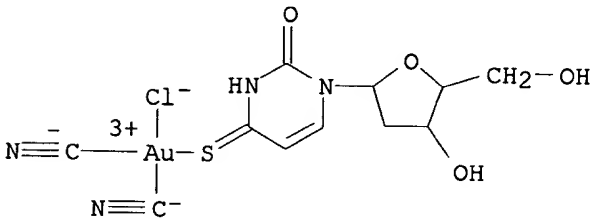
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 3 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 208833-20-9 REGISTRY
CN **Gold(2+), diamminechloro(2'-deoxy-4-thiouridine-.kappa.S4)-, (SP-4-2)- (9CI)** (CA INDEX NAME)
MF C9 H18 Au Cl N4 O4 S
CI CCS
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

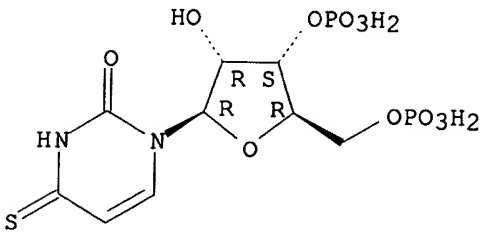
L1 ANSWER 4 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 208833-16-3 REGISTRY
CN **Gold, chlorobis(cyano-.kappa.C)(2'-deoxy-4-thiouridine-.kappa.S4)-, (SP-4-2)- (9CI)** (CA INDEX NAME)
MF C11 H12 Au Cl N4 O4 S
CI CCS
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 5 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 193290-84-5 REGISTRY
CN 3'-Uridylic acid, 4-thio-, 5'-(dihydrogen phosphate) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **4-Thiouridine 3',5'-diphosphate**
FS STEREOSEARCH
MF C9 H14 N2 O11 P2 S
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 6 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 125690-21-3 REGISTRY
CN **5'-Inosinic acid, homopolymer, complex with 5'-cytidylic acid polymer with 4-thiouridine (1:1) (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **5'-Cytidylic acid, polymer with 4-thiouridine, complex with 5'-inosinic acid homopolymer (1:1) (9CI)**
CN Uridine, 4-thio-, polymer with 5'-cytidylic acid, complex with 5'-inosinic acid homopolymer (1:1) (9CI)
FS STEREOSEARCH
MF (C10 H13 N4 O8 P)x . (C9 H14 N3 O8 P . C9 H12 N2 O5 S)x
PCT Polynucleotide, Polyother
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

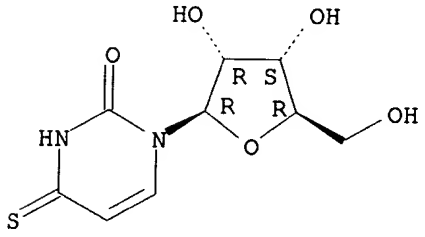
CM 1

CRN 125690-20-2
CMF (C9 H14 N3 O8 P . C9 H12 N2 O5 S)x
CCI PMS

CM 2

CRN 13957-31-8
CMF C9 H12 N2 O5 S

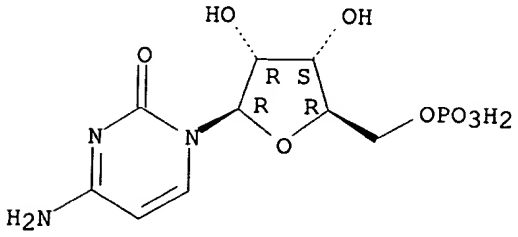
Absolute stereochemistry.



CM 3

CRN 63-37-6
CMF C9 H14 N3 O8 P

Absolute stereochemistry.



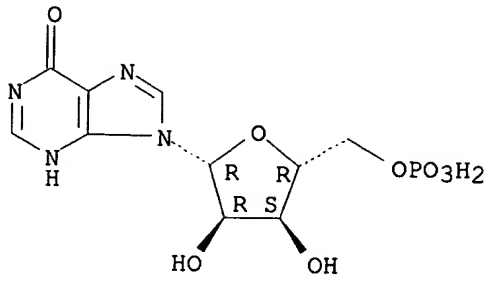
CM 4

CRN 30918-54-8
CMF (C10 H13 N4 O8 P)x
CCI PMS

CM 5

CRN 131-99-7
CMF C10 H13 N4 O8 P

Absolute stereochemistry.



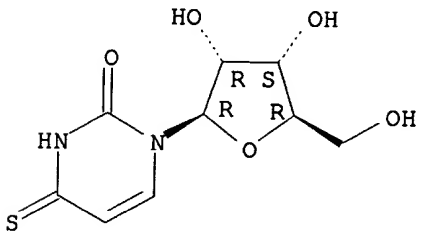
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 7 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 125690-20-2 REGISTRY
CN **5'-Cytidylic acid, polymer with 4-thiouridine (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine, 4-thio-, polymer with 5'-cytidylic acid (9CI)
FS STEREOSEARCH
MF (C9 H14 N3 O8 P . C9 H12 N2 O5 S)x
CI PMS, COM
PCT Polynucleotide, Polyother
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

CRN 13957-31-8
CMF C9 H12 N2 O5 S

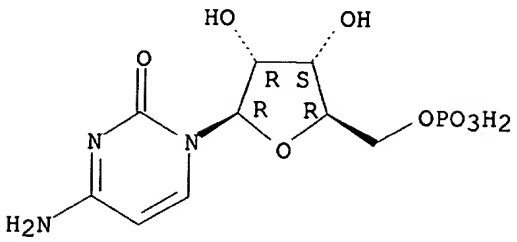
Absolute stereochemistry.



CM 2

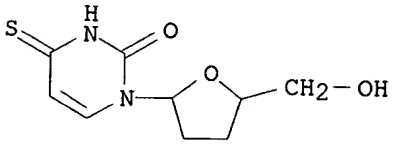
CRN 63-37-6
CMF C9 H14 N3 O8 P

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 8 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 122568-04-1 REGISTRY
CN Uridine, 2',3'-dideoxy-4-thio- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **2',3'-Dideoxy-4-thiouridine**
MF C9 H12 N2 O3 S
SR CA
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

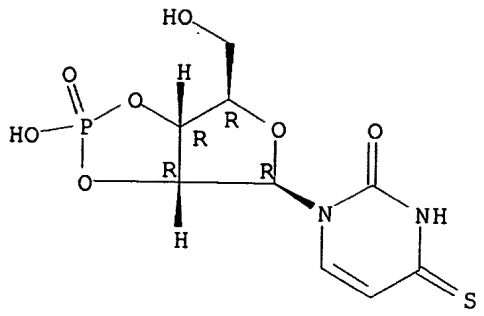
2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 9 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 72328-25-7 REGISTRY
CN Uridine, 4-thio-, cyclic 2',3'-(hydrogen phosphate), compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Ethanamine, N,N-diethyl-, compd. with 4-thiouridine cyclic 2',3'-(hydrogen phosphate) (1:1)**
CN Furo[3,4-d]-1,3,2-dioxaphosphole, uridine deriv.
FS STEREOSEARCH
MF C9 H11 N2 O7 P S . C6 H15 N
LC STN Files: CA, CAPLUS

CM 1

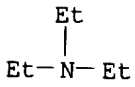
CRN 17682-94-9
CMF C9 H11 N2 O7 P S

Absolute stereochemistry.



CM 2

CRN 121-44-8
CMF C6 H15 N



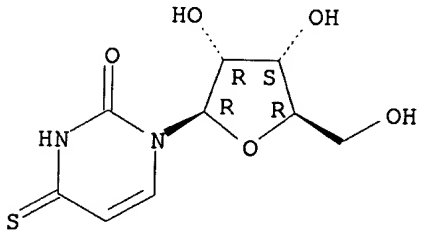
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 10 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 60280-54-8 REGISTRY
CN Uridine, 4-thio-, compd. with cytidine (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Cytidine, compd. with 4-thiouridine (1:1) (9CI)**
FS STEREOSEARCH
MF C9 H13 N3 O5 . C9 H12 N2 O5 S
LC STN Files: CA, CAPLUS

CM 1

CRN 13957-31-8
CMF C9 H12 N2 O5 S

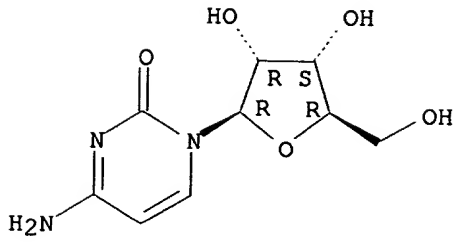
Absolute stereochemistry.



CM 2

CRN 65-46-3
CMF C9 H13 N3 O5

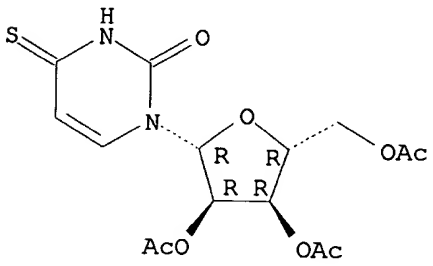
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 11 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 55003-25-3 REGISTRY
CN Uridine, 4-thio-, 2',3',5'-triacetate (7CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN **4-Thiouridine triacetate**
FS STEREOSEARCH
MF C15 H18 N2 O8 S
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

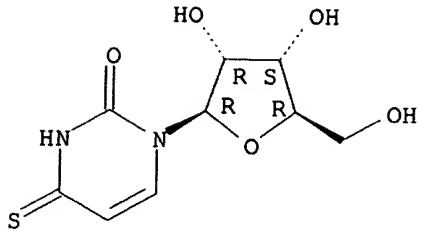
8 REFERENCES IN FILE CA (1962 TO DATE)
8 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 12 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 52880-59-8 REGISTRY
CN Uridine, 4-thio-, polymer with cytidine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Cytidine, polymer with 4-thiouridine (9CI)**
FS STEREOSEARCH
MF (C9 H13 N3 O5 . C9 H12 N2 O5 S)x
CI PMS
PCT Polyother, Polyother only
LC STN Files: CA, CAPLUS

CM 1

CRN 13957-31-8
CMF C9 H12 N2 O5 S

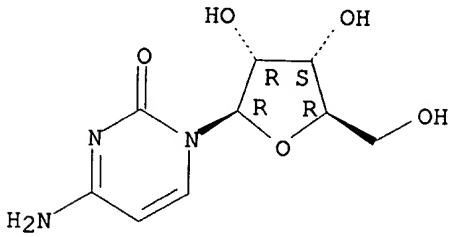
Absolute stereochemistry.



CM 2

CRN 65-46-3
CMF C9 H13 N3 O5

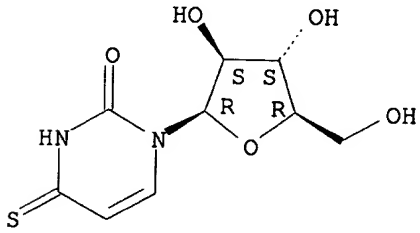
Absolute stereochemistry.



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 13 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 41547-46-0 REGISTRY
CN 2(1H)-Pyrimidinone, 1-.beta.-D-arabinofuranosyl-3,4-dihydro-4-thioxo-, monohydrate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **arabino-4-Thiouridine monohydrate**
FS STEREOSEARCH
MF C9 H12 N2 O5 S . H2 O
LC STN Files: CA, CAPLUS
CRN (32754-06-6)

Absolute stereochemistry.

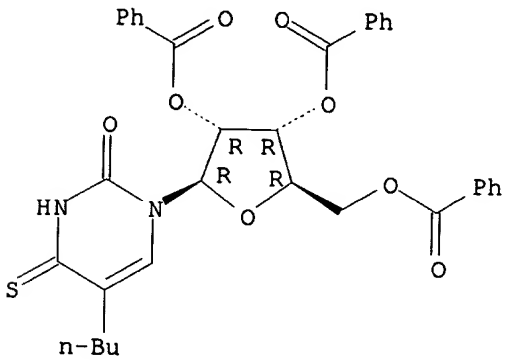


H_2O

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 14 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 40110-84-7 REGISTRY
CN Uridine, 5-butyl-4-thio-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **5-Butyl-2',3',5'-tri-O-benzoyl-4-thiouridine**
FS STEREOSEARCH
MF C34 H32 N2 O8 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.

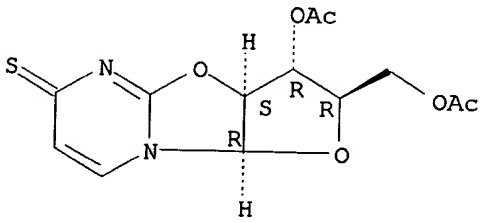


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 15 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 39687-12-2 REGISTRY
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidine-6-thione, 3-(acetyloxy)-2-[(acetyloxy)methyl]-2,3,3a,9a-tetrahydro-, [2R-(2.alpha.,3.beta.,3a.beta.,9a.beta.)]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **3',5'-Di-O-acetyl-2,2'-anhydro-4-thiouridine**
FS STEREOSEARCH
DR 55334-44-6
MF C13 H14 N2 O6 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, SPECINFO
(*File contains numerically searchable property data)

Absolute stereochemistry.

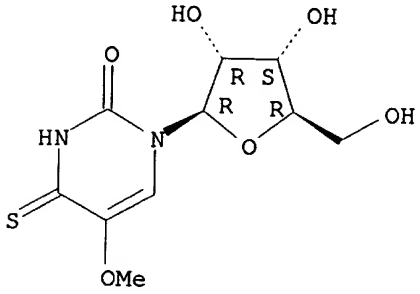


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 16 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 37805-89-3 REGISTRY
CN Uridine, 5-methoxy-4-thio- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **5-Methoxy-4-thiouridine**
FS STEREOSEARCH
MF C10 H14 N2 O6 S
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

Absolute stereochemistry.

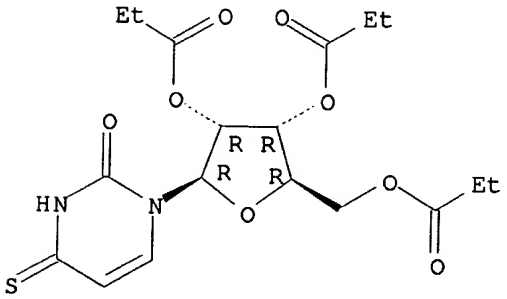


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 17 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 37676-74-7 REGISTRY
CN Uridine, 4-thio-, 2',3',5'-tripropanoate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **2',3',5'-Tri-O-propionyl-4-thiouridine**
FS STEREOSEARCH
MF C18 H24 N2 O8 S
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

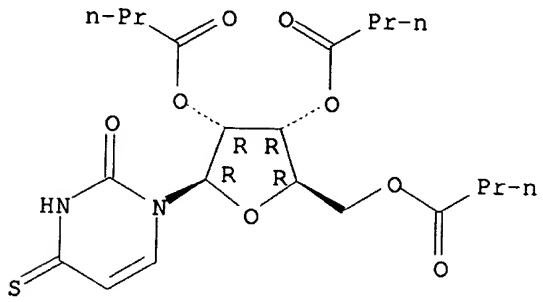


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 18 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 37676-73-6 REGISTRY
CN Uridine, 4-thio-, 2',3',5'-tributanoate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **2',3',5'-Tri-O-butyryl-4-thiouridine**
FS STEREOSEARCH
MF C21 H30 N2 O8 S
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

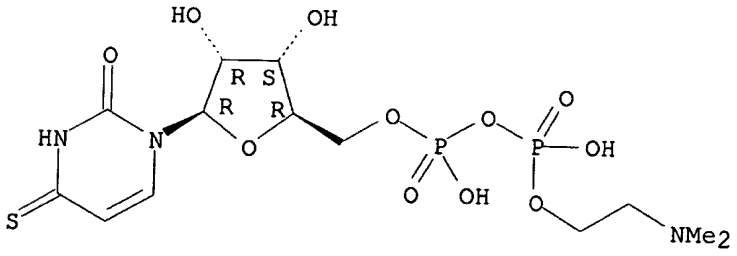


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 19 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 34918-22-4 REGISTRY
CN Uridine 5'-(trihydrogen diphosphate), 4-thio-, P'-[2-(dimethylamino)ethyl] ester (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **4-Thiouridine 5'-diphosphoric N,N-dimethylethanolamine**
FS STEREOSEARCH
MF C13 H23 N3 O11 P2 S
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



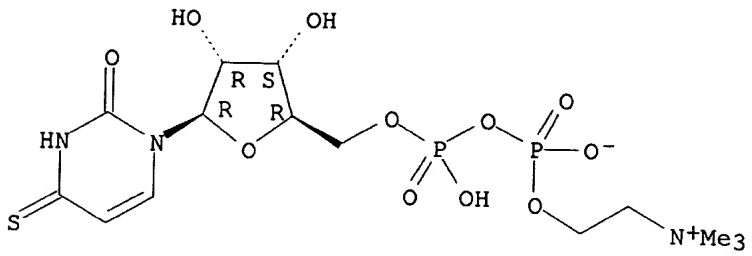
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 20 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 34918-21-3 REGISTRY

CN Uridine 5'-(trihydrogen diphosphate), 4-thio-, P'-[2-(trimethylammonio)ethyl] ester, inner salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **4-Thiouridine 5'-diphosphoric choline**
CN **4-Thiouridine diphosphate choline**
FS STEREOSEARCH
MF C14 H25 N3 O11 P2 S
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

Absolute stereochemistry.



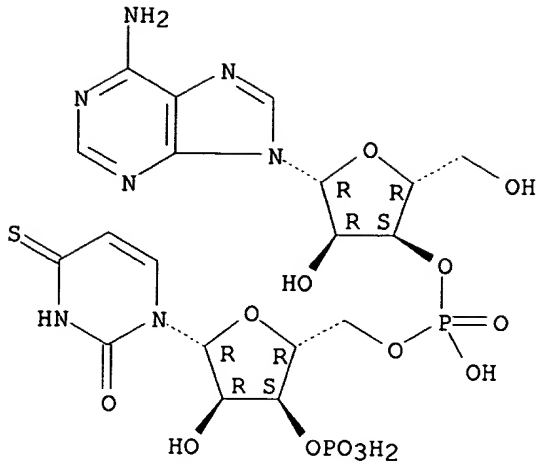
3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 21 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 33572-83-7 REGISTRY
CN 3'-Uridylic acid, adenylyl-(3'.fwdarw.5')-4-thio-, homopolymer (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine, 3'-O-phosphoryl-4-thiouridylyl-(5'.fwdarw.3')-, polymers (8CI)
OTHER NAMES:
CN **Poly r(A-4-thiouridine)**
CN Poly[r(A-s4U)]
FS STEREOSEARCH
MF (C19 H25 N7 O14 P2 S)x
CI PMS
PCT Polynucleotide
LC STN Files: CA, CAPLUS

CM 1

CRN 47844-68-8
CMF C19 H25 N7 O14 P2 S

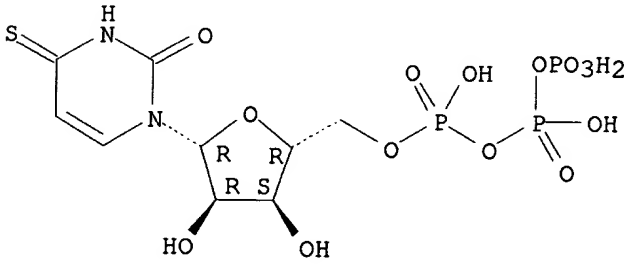
Absolute stereochemistry.



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 22 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 31556-28-2 REGISTRY
CN Uridine 5'-(tetrahydrogen triphosphate), 4-thio- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine, 4-thio-, 5'-(tetrahydrogen triphosphate) (8CI)
OTHER NAMES:
CN 4-Thio-UTP
CN **4-Thiouridine 5'-triphosphate**
CN **4-Thiouridine triphosphate**
FS STEREOSEARCH
MF C9 H15 N2 O14 P3 S
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CANCERLIT, CAPLUS, CHEMCATS, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

26 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
26 REFERENCES IN FILE CAPLUS (1962 TO DATE)

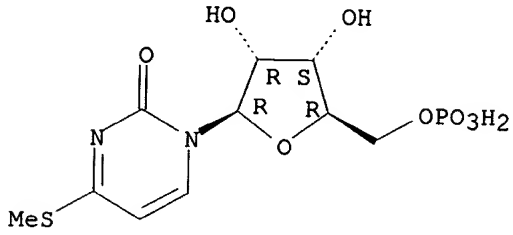
L1 ANSWER 23 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 30305-60-3 REGISTRY
CN 2(1H)-Pyrimidinone, 4-(methylthio)-1-.beta.-D-ribofuranosyl-, 5'-(dihydrogen phosphate), polymers (8CI) (CA INDEX NAME)
OTHER NAMES:

CN **Poly-S4-methyl-4-thiouridine-5'-phosphate**
FS STEREOSEARCH
DR 31693-19-3
MF (C10 H15 N2 O8 P S)x
CI PMS
PCT Polynucleotide
LC STN Files: CA, CAPLUS

CM 1

CRN 30253-74-8
CMF C10 H15 N2 O8 P S

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 24 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 30284-34-5 REGISTRY
CN **5'-Adenylic acid, polymers, complex with 5'-uridylic acid polymer with 4-thiouridine 5'-(dihydrogen phosphate) (1:2) (8CI)** (CA INDEX NAME)
FS STEREOSEARCH
MF (C10 H14 N5 O7 P)x . 2 (C9 H13 N2 O9 P . C9 H13 N2 O8 P S)x
PCT Polynucleotide

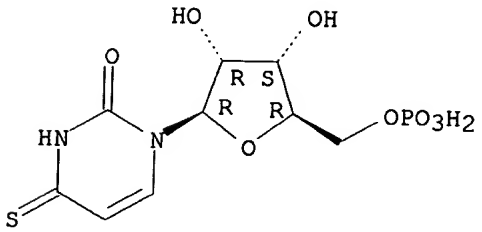
CM 1

CRN 26970-41-2
CMF (C9 H13 N2 O9 P . C9 H13 N2 O8 P S)x
CCI PMS

CM 2

CRN 4145-46-4
CMF C9 H13 N2 O8 P S

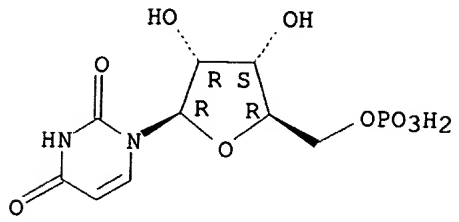
Absolute stereochemistry.



CM 3

CRN 58-97-9
CMF C9 H13 N2 O9 P

Absolute stereochemistry.



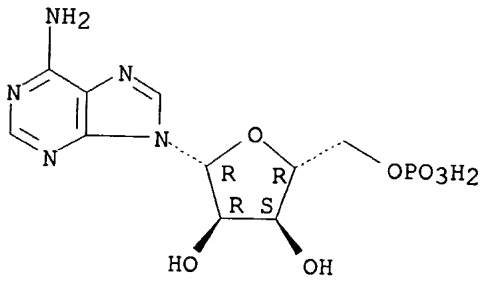
CM 4

CRN 24937-83-5
CMF (C10 H14 N5 O7 P)x
CCI PMS

CM 5

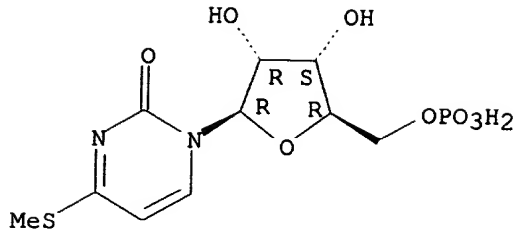
CRN 61-19-8
CMF C10 H14 N5 O7 P

Absolute stereochemistry.



L1 ANSWER 25 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 30253-74-8 REGISTRY
CN 2(1H)-Pyrimidinone, 4-(methylthio)-1-.beta.-D-ribofuranosyl-, 5'-(dihydrogen phosphate) (8CI) (CA INDEX NAME)
OTHER NAMES:
CN **S4-Methyl-4-thiouridine-5'-diphosphate**
FS STEREOSEARCH
MF C10 H15 N2 O8 P S
CI COM
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 26 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 29535-61-3 REGISTRY
CN **5'-Adenylic acid, polymers, complex with 4-thiouridine 5'-(dihydrogen phosphate) polymers (1:2) (8CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine, 4-thio-, 5'-(dihydrogen phosphate), polymers, complex with 5'-adenylic acid polymers (2:1) (8CI)
FS STEREOSEARCH
MF (C10 H14 N5 O7 P)x . 2 (C9 H13 N2 O8 P S)x
PCT Polynucleotide
LC STN Files: CA, CAPLUS

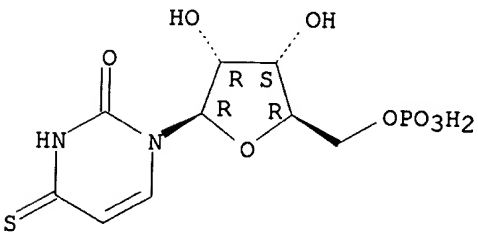
CM 1

CRN 27732-48-5
CMF (C9 H13 N2 O8 P S)x
CCI PMS

CM 2

CRN 4145-46-4
CMF C9 H13 N2 O8 P S

Absolute stereochemistry.



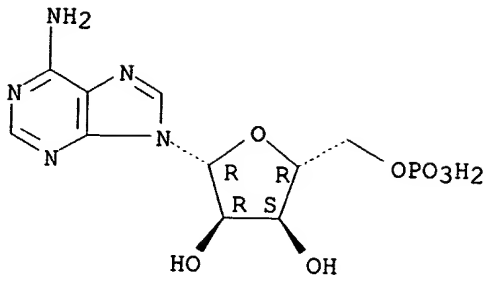
CM 3

CRN 24937-83-5
CMF (C10 H14 N5 O7 P)x
CCI PMS

CM 4

CRN 61-19-8
CMF C10 H14 N5 O7 P

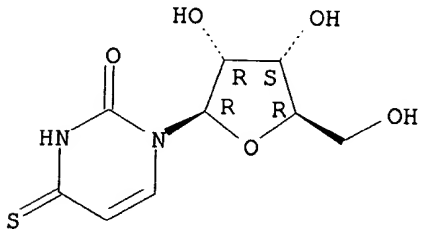
Absolute stereochemistry.

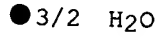


1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 27 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 28619-37-6 REGISTRY
CN Uridine, 4-thio-, sesquihydrate (8CI) (CA INDEX NAME)
OTHER NAMES:
CN **4-Thiouridine hydrate**
FS STEREOSEARCH
MF C9 H12 N2 O5 S . 3/2 H2 O
LC STN Files: BIOSIS, CA, CAPLUS
CRN (13957-31-8)

Absolute stereochemistry.

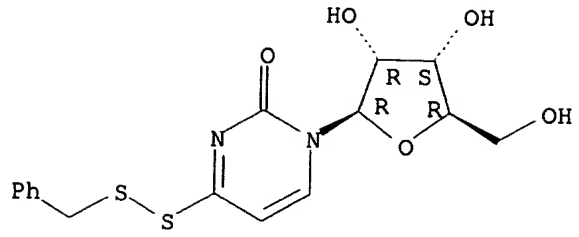




1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 28 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 28401-65-2 REGISTRY
CN 2(1H)-Pyrimidinone, 4-(benzyldithio)-1-.beta.-D-ribofuranosyl- (8CI) (CA INDEX NAME)
OTHER NAMES:
CN **Benzyl-4-thiouridine disulfide**
FS STEREOSEARCH
MF C16 H18 N2 O5 S2
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

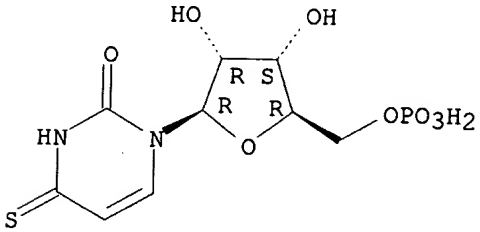
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 29 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 26970-41-2 REGISTRY
CN 5'-Uridylic acid, 4-thio-, polymer with 5'-uridylic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5'-Uridylic acid, polymer with 4-thio-5'-uridylic acid (9CI)
CN **5'-Uridylic acid, polymer with 4-thiouridine 5'-(dihydrogen phosphate) (8CI)**
CN Uridine, 4-thio-, 5'-(dihydrogen phosphate), polymer with 5'-uridylic acid (8CI)
FS STEREOSEARCH
MF (C9 H13 N2 O9 P . C9 H13 N2 O8 P S)x
CI PMS, COM
PCT Polynucleotide
LC STN Files: CA, CAPLUS

CM 1

CRN 4145-46-4
CMF C9 H13 N2 O8 P S

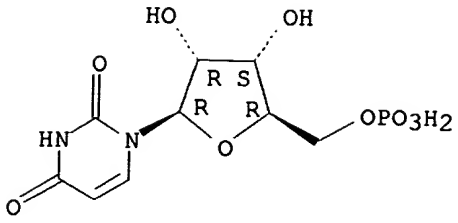
Absolute stereochemistry.



CM 2

CRN 58-97-9
CMF C9 H13 N2 O9 P

Absolute stereochemistry.



5 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
5 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 30 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 24939-05-7 REGISTRY
CN **5'-Adenylic acid, polymers, complex with 5'-uridylic acid polymer with 4-thiouridine 5'-(dihydrogen phosphate) (1:1) (8CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **5'-Uridylic acid, polymer with 4-thiouridine 5'-(dihydrogen phosphate), complex with 5'-adenylic acid polymers (1:1) (8CI)**
CN Uridine, 4-thio-, 5'-(dihydrogen phosphate), polymer with 5'-uridylic acid, complex with 5'-adenylic acid polymers (1:1) (8CI)
FS STEREOSEARCH
MF (C10 H14 N5 O7 P)x . (C9 H13 N2 O9 P . C9 H13 N2 O8 P S)x
PCT Polynucleotide
LC STN Files: CA, CAPLUS

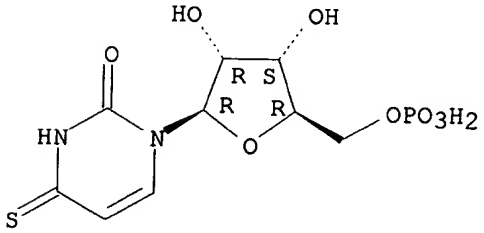
CM 1

CRN 26970-41-2
CMF (C9 H13 N2 O9 P . C9 H13 N2 O8 P S)x
CCI PMS

CM 2

CRN 4145-46-4
CMF C9 H13 N2 O8 P S

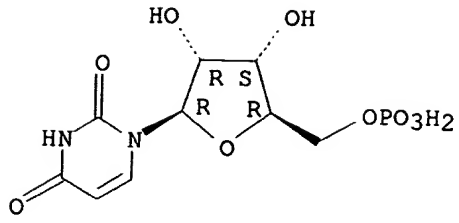
Absolute stereochemistry.



CM 3

CRN 58-97-9
CMF C9 H13 N2 O9 P

Absolute stereochemistry.



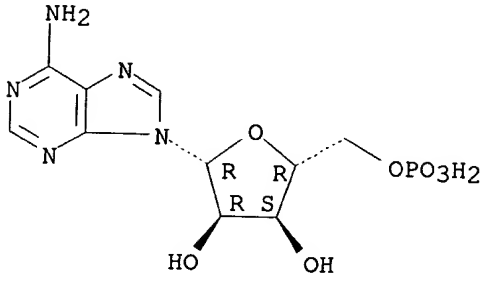
CM 4

CRN 24937-83-5
CMF (C10 H14 N5 O7 P)x
CCI PMS

CM 5

CRN 61-19-8
CMF C10 H14 N5 O7 P

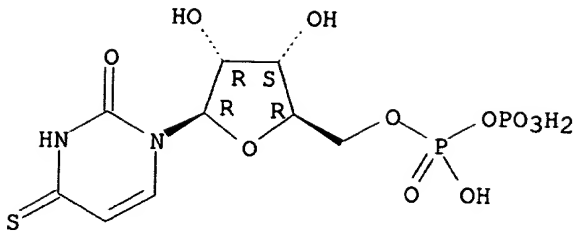
Absolute stereochemistry.



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 31 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 24868-15-3 REGISTRY
CN Uridine 5'-(trihydrogen diphosphate), 4-thio- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine, 4-thio-, 5'-(trihydrogen pyrophosphate) (8CI)
OTHER NAMES:
CN 4-Thio-UDP
CN **4-Thiouridine 5'-diphosphate**
FS STEREOSEARCH
DR 25953-20-2
MF C9 H14 N2 O11 P2 S
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CSCHEM, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.

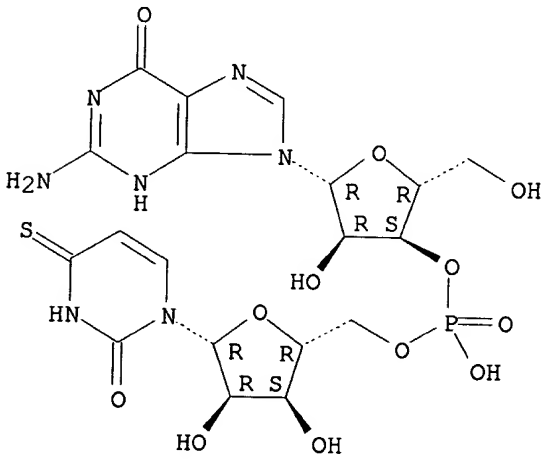


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

17 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
17 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 32 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 24380-38-9 REGISTRY
CN Uridine, guanylyl-(3'.fwdarw.5')-4-thio- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine, 4-thiouridylyl-(5'.fwdarw.3')- (8CI)
OTHER NAMES:
CN **Guanylyl-(3'.fwdarw.5')-4-thiouridine**
FS STEREOSEARCH
MF C19 H24 N7 O12 P S
LC STN Files: CA, CAPLUS, CSCHEM

Absolute stereochemistry.



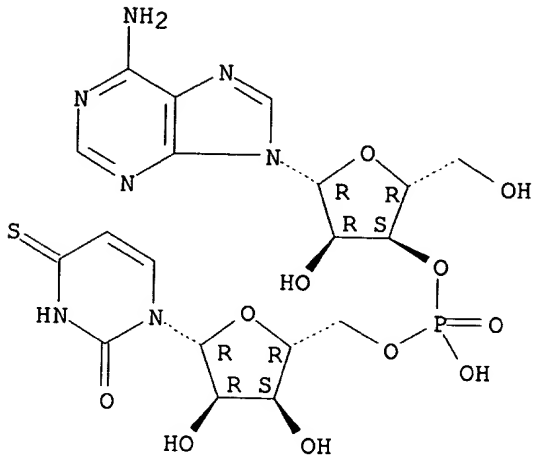
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 33 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 24380-37-8 REGISTRY
CN Uridine, adenylyl-(3'.fwdarw.5')-4-thio- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine, 4-thiouridylyl-(5'.fwdarw.3')- (8CI)
OTHER NAMES:
CN **Adenylyl-(3'.fwdarw.5')-4-thiouridine**
FS STEREOSEARCH

MF C19 H24 N7 O11 P S
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

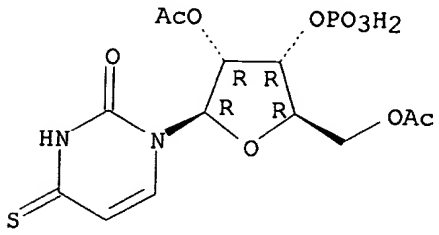
7 REFERENCES IN FILE CA (1962 TO DATE)
7 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 34 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 22344-96-3 REGISTRY
CN Uridine, 4-thio-, 2',5'-diacetate 3'-(dihydrogen phosphate), compd. with pyridine (1:1) (8CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Pyridine, compd. with 4-thiouridine 2',5'-diacetate 3'-(dihydrogen phosphate) (1:1) (8CI)**
FS STEREOSEARCH
MF C13 H17 N2 O10 P S . C5 H5 N
LC STN Files: CA, CAPLUS

CM 1

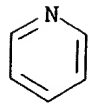
CRN 47541-16-2
CMF C13 H17 N2 O10 P S

Absolute stereochemistry.



CM 2

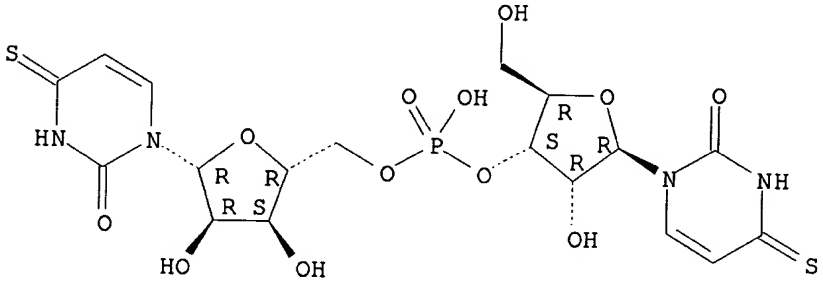
CRN 110-86-1
CMF C5 H5 N



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 35 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 22249-20-3 REGISTRY
CN Uridine, 4-thiouridylyl-(3'.fwdarw.5')-4-thio- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN **4-Thiouridylyl-(3',5')-4-thiouridine**
FS STEREOSEARCH
MF C18 H23 N4 O12 P S2
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

Absolute stereochemistry.

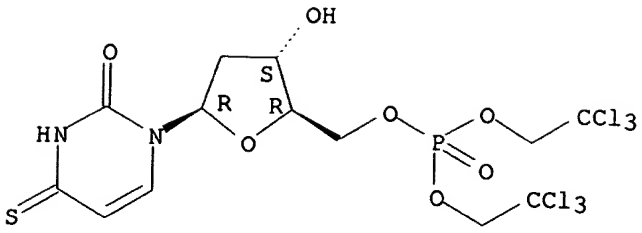


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1962 TO DATE)
5 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 36 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 20744-76-7 REGISTRY
CN Uridine, 2'-deoxy-4-thio-, 5'-[bis(2,2,2-trichloroethyl) phosphate] (8CI)
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Ethanol, 2,2,2-trichloro-, hydrogen phosphate 5'-ester with 2'-deoxy-4-thiouridine**
FS STEREOSEARCH
MF C13 H15 Cl6 N2 O7 P S
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

Absolute stereochemistry.

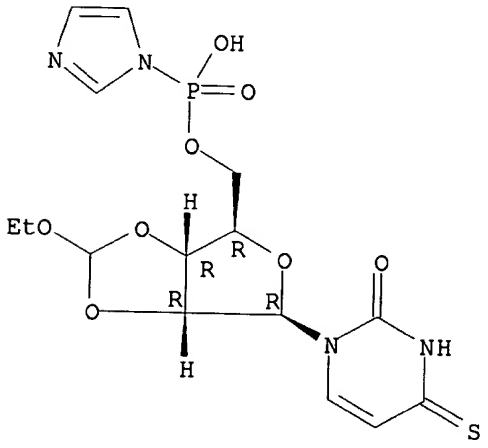


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 37 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 20188-71-0 REGISTRY
CN Uridine, 4-thio-, cyclic 2',3'-(ethyl orthoformate) 5'-(hydrogen imidazol-1-ylphosphonate) (8CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Orthoformic acid, cyclic 2',3'-ester with 4-thiouridine 5'-(hydrogen imidazol-1-ylphosphonate)**
FS STEREOSEARCH
MF C15 H19 N4 O8 P S
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

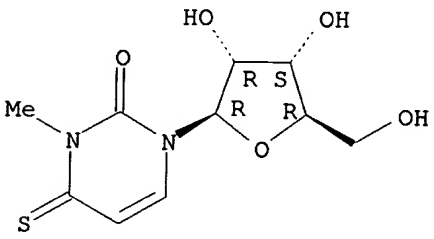
L1 ANSWER 38 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 20188-70-9 REGISTRY
CN Uridine, 4-thio-, cyclic 2',3'-(ethyl orthoformate) (8CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Orthoformic acid, cyclic 2',3'-ester with 4-thiouridine, ethyl ester**
FS STEREOSEARCH
MF C12 H16 N2 O6 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1962 TO DATE)
9 REFERENCES IN FILE CAPLUS (1962 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 42 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 14985-38-7 REGISTRY
CN Uridine, 3-methyl-4-thio- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN **3-Methyl-4-thiouridine**
FS STEREOSEARCH
MF C10 H14 N2 O5 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

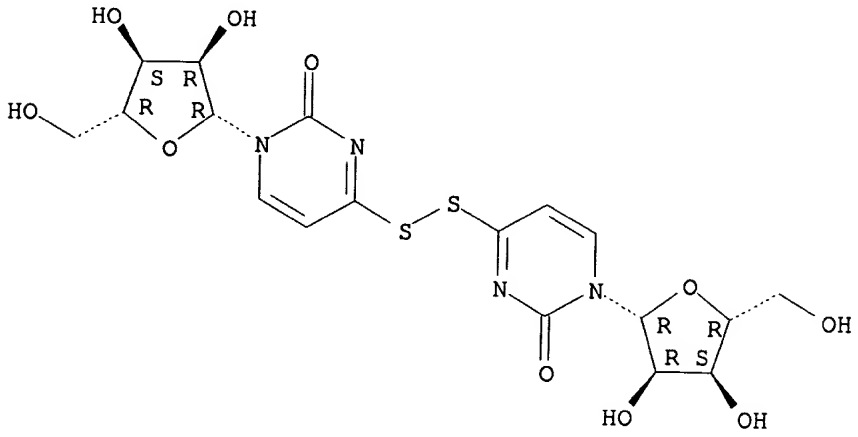
4 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 43 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 13957-31-8 REGISTRY
CN Uridine, 4-thio- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN **4-Thiouridine**
CN Thiouridine
FS STEREOSEARCH
DR 17676-63-0
MF C9 H12 N2 O5 S
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, MEDLINE, PROMT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

9CI) (CA INDEX NAME)
OTHER NAMES:
CN **4-Thiouridine disulfide**
CN NSC 677475
FS STEREOSEARCH
MF C18 H22 N4 O10 S2
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CSCHEM, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.

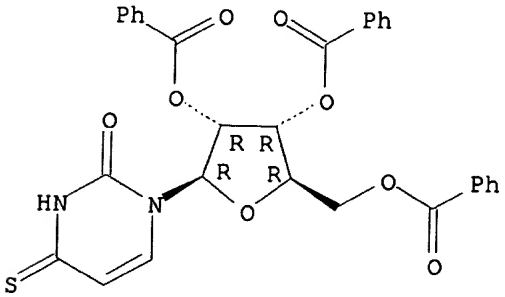


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

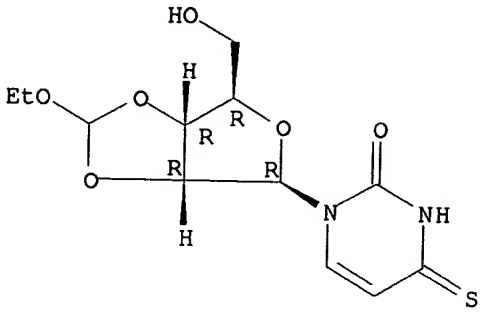
21 REFERENCES IN FILE CA (1962 TO DATE)
21 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 41 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 15049-50-0 REGISTRY
CN Uridine, 4-thio-, 2',3',5'-tribenzoate (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN **2',3',5'-Tribenzoyl-4-thiouridine**
FS STEREOSEARCH
MF C30 H24 N2 O8 S
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.



Absolute stereochemistry.

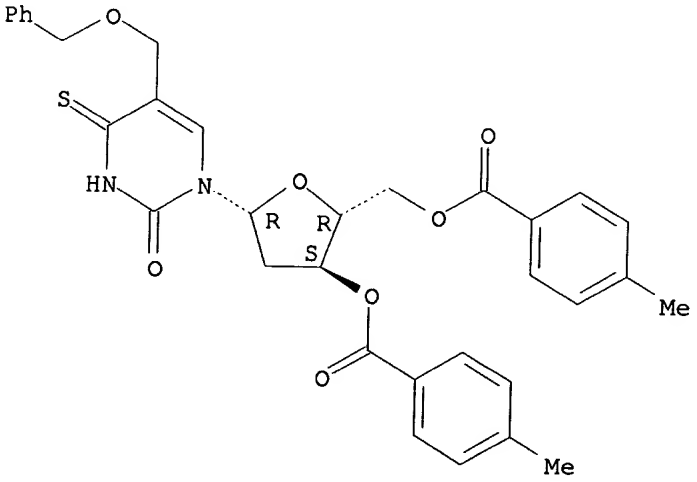


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 39 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 19083-34-2 REGISTRY
CN Uridine, 5-[(benzyloxy)methyl]-2'-deoxy-4-thio-, 3',5'-di-p-toluate (8CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **p-Toluic acid, 3',5'-diester with 5-[(benzyloxy)methyl]-2'-deoxy-4-thiouridine**
FS STEREOSEARCH
MF C33 H32 N2 O7 S
LC STN Files: CA, CAPLUS

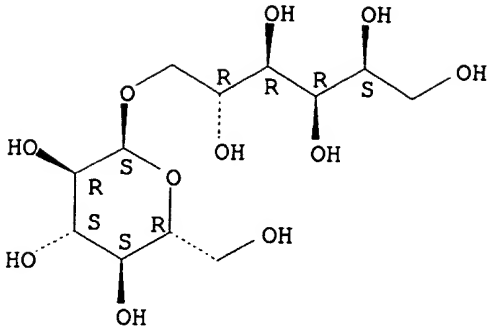
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 40 OF 48 REGISTRY COPYRIGHT 2002 ACS
RN 18427-02-6 REGISTRY
CN 2(1H)-Pyrimidinone, 4,4'-dithiobis[1-.beta.-D-ribofuranosyl- (6CI, 8CI,



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

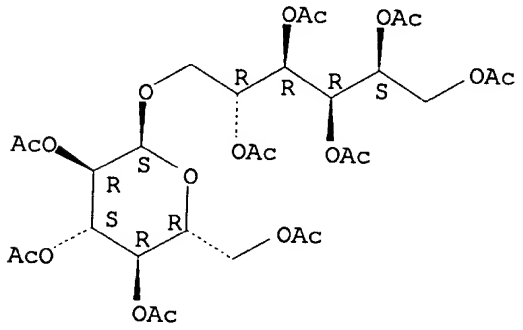
120 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
120 REFERENCES IN FILE CAPLUS (1962 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d l2 1-2

L2 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 41897-25-0 REGISTRY
CN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **Isomaltitol nonaacetate**
FS STEREOSEARCH
MF C30 H42 O20
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L2 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 534-73-6 REGISTRY
CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glucitol, 6-O-.alpha.-D-glucopyranosyl-, D- (8CI)
CN **Isomaltitol (6CI)**
OTHER NAMES:
CN 6-O-.alpha.-D-Glucopyranosyl-D-glucitol
CN 6-O-.alpha.-D-Glucopyranosyl-D-sorbitol
FS STEREOSEARCH
DR 124569-58-0, 297757-21-2
MF C12 H24 O11
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, NAPRALERT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

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(FILE 'HOME' ENTERED AT 10:46:20 ON 01 OCT 2002)

FILE 'REGISTRY' ENTERED AT 10:46:24 ON 01 OCT 2002

FILE 'CAPLUS' ENTERED AT 10:47:03 ON 01 OCT 2002
L1          607 S 211427-11-1/RN OR 193290-84-5/RN OR 122568-04-1/RN OR 60280-5
L2          728 S L1 OR 4145-46-4/RN OR 6814-92-2/RN OR 5580-20-1/RN OR 13957-3
L3          140 S ISOMALTITOL OR 41897-25-0/RN OR 534-73-6/RN

FILE 'REGISTRY' ENTERED AT 10:53:30 ON 01 OCT 2002
L4        27471 S URIDINE

FILE 'CAPLUS' ENTERED AT 10:53:46 ON 01 OCT 2002
L5        24042 S URIDINE
                E INFLAMMATION/CT
L6        22496 S E3,E4,E7
                E HEMOSTASIS/CT
L7         4410 S E3,E4 OR HEMOSTASIS
                E PLATELET/CT
L8         9587 S E11, E4, E5-9
L9          428 S L7 AND L8
L10         232 S L2 AND L5
L11           1 S L2 AND L9
L12           1 S L3 AND L8
L13           1 S L3 AND L9
L14         232 S L2 AND L5
L15           1 S L3 AND L5
L16          29 S L5  AND L6
L17           0 S L3 AND L6
L18           0 S L2 AND L6
L19       65728 S L1 OR L2 OR L4
L20       24538 S L1 OR L2 OR L5
L21          29 S L20 AND L6
L22           6 S L20 AND L7
L23          29 FOCUS L21 1-

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5/4/23 — iso maltitol

L22 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:367213 CAPLUS
DOCUMENT NUMBER: 136:382185
TITLE: Human CD39 proteins with nucleotide diphosphatase activity and their use in diagnosis and treatment of thrombotic diseases
INVENTOR(S): Ford, John; Mulero, Julio J.
PATENT ASSIGNEE(S): Hyseq, Inc., USA
SOURCE: U.S., 46 pp., Cont.-in-part of U.S. Ser. No. 273,447, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6387645	B1	20020514	US 1999-350836	19990709
WO 2000004041	A2	20000127	WO 1999-US16180	19990716
WO 2000004041	A3	20010712		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9950021	A1	20000207	AU 1999-50021	19990716
EP 1133563	A2	20010919	EP 1999-934117	19990716
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002520040	T2	20020709	JP 2000-560147	19990716
US 6447771	B1	20020910	US 1999-370265	19990809
US 6335013	B1	20020101	US 2000-608285	20000630

PRIORITY APPLN. INFO.:

US 1998-118205	B2	19980716
US 1998-122449	B2	19980724
US 1999-273447	B2	19990319
US 1999-244444	A	19990204
US 1999-350836	A	19990709
WO 1999-US16180	W	19990716
US 1999-370265	A2	19990809
US 2000-481238	A2	20000111
US 2000-557800	A2	20000425
US 2000-583231	A2	20000526

AB The invention provides novel polynucleotides isolated from cDNA libraries of human fetal liver-spleen and macrophage as well as polypeptides encoded by these polynucleotides and mutants or variants thereof. The polypeptides correspond to a novel human CD39 (cluster of differentiation 39) L66 isoform protein. Also provided are drug screening assays to identify effectors of the CD39-L4 isoform and Ca2+ and Mg2+(at 2 mM concn.) stimulated the NDPase activity of CD39-L4 where the concn. of the NDP substrate was at least 1 mM. CD39-L4 is the first reported human secreted ecto-apyrase. CD39-L4 contains a leader peptide and its synthesis may be blocked by brefeldin A, an inhibitor of mammalian secretory pathways. CD39-L4 mRNA is expressed in macrophages, suggesting that the protein is present in the circulation. Furthermore, CD39-L4 is shown to be an E-type apyrase, is dependent on calcium and magnesium cations, and has high degree of specificity for NDPs over NTPs as enzymic

substrates. A potential physiol. role in **hemostasis** and platelet aggregation is presented.

RE

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L22 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:144178 CAPLUS
DOCUMENT NUMBER: 136:334993
TITLE: Biochemical and Functional Characterization of Recombinant Rhodnius prolixus Platelet Aggregation Inhibitor 1 as a Novel Lipocalin with High Affinity for Adenosine Diphosphate and Other Adenine Nucleotides
AUTHOR(S): Francischetti, Ivo M. B.; Andersen, John F.; Ribeiro, Jose M. C.
CORPORATE SOURCE: Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, 20892-0425, USA
SOURCE: Biochemistry (2002), 41(11), 3810-3818
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The Rhodnius prolixus aggregation inhibitor 1 (RPAI-1) is a novel blood-sucking salivary mol. that binds to ADP and attenuates platelet aggregation. In this report, we det. the binding consts. and specificity of RPAI-1 for adenine nucleotides and its functional significance. By the Hummel-Dreyer method of equil. gel filtration, we show that RPAI-1 binds ADP with a K0.5 of 48.6.+-.12.2 nM. RPAI-1 also displays high-affinity binding to ATP, AMP, Ado, AP4A, and .alpha.,.beta.-Met ADP; however, RPAI-1 does not bind to inosine, guanosine, **uridine**, or cytidine. Binding is not modified by EDTA, indicating that Ado structure but not phosphate groups or Ca2+ is necessary for binding. By computer simulation, we show that RPAI-1 is more effective in scavenging low but

not high concns. of ADP, in contrast to R. prolixus apyrase. RPAI-1 inhibits in vitro the ADP-dependent platelet-rich plasma aggregation by collagen (COLL), TRAP, PAF, and A23187 but did not block platelet aggregation by ristocetin or phorbol myristate acetate (PMA) and only slightly attenuated that by convulxin. RPAI-1 prolongs the closure time as assessed with PFA-100, when COLL-Epi but not COLL-ADP cartridges are employed. RPAI-1 also affects platelet-mediated **hemostasis** time and COLL-induced thrombus formation at high shear as assessed with the Clot Signature Analyzer. We conclude that RPAI-1 exerts an antiplatelet effect due to scavenging of low concns. of ADP in vitro and in vivo. RPAI-1 is the first lipocalin described so far with unique specificity for adenine nucleotides.

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L22 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:814315 CAPLUS
DOCUMENT NUMBER: 133:344613
TITLE: **4-Thiouridine**, isomaltitol, and **uridine** as inhibitors of acute and chronic inflammation and problems in **hemostasis**
INVENTOR(S): Uppugunduri, Srinivas
PATENT ASSIGNEE(S): Swed.
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000067759	A1	20001116	WO 2000-SE827	20000502
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
SE 9901615	A	20001215	SE 1999-1615	19990505
EP 1181021	A1	20020227	EP 2000-937418	20000502
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002061863	A1	20020523	US 2001-986522	20011102

PRIORITY APPLN. INFO.:
SE 1999-1615 A 19990505
WO 2000-SE827 W 20000502

AB The invention discloses the use of one or more of **4-thiouridine**, isomaltitol, and **uridine** in the prepn. of therapeutically effective compns. against acute or chronic inflammation and/or problems in **hemostasis** related to platelet function, as well as a method for treatment of acute or chronic inflammation and/or problems in **hemostasis** related to platelet function, with the exception of the use of **uridine** in the treatment of inflammatory conditions caused by a bacterial infection.

IT **13957-31-8, 4-Thiouridine**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiouridine, isomaltitol, and **uridine** as inhibitors of acute and chronic inflammation and problems in **hemostasis**)

RE
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(2) Pro-Neuron Inc; WO 9601115 A1 1996 CAPLUS
(3) Pro-Neuron Inc; WO 9413687 A1 1997 CAPLUS

L22 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:222711 CAPLUS
DOCUMENT NUMBER: 132:343666
TITLE: P2Y receptor regulation of PAI-1 expression in vascular smooth muscle cells
AUTHOR(S): Bouchie, Julie L.; Chen, Hong-Chi; Carney, Rebbeca; Bagot, J. Courtney; Wilden, Peter A.; Feener, Edward P.

CORPORATE SOURCE: Research Division, Joslin Diabetes Center, Harvard Medical School, Boston, MA, USA
SOURCE: Arteriosclerosis, Thrombosis, and Vascular Biology (2000), 20(3), 866-873
CODEN: ATVBFA; ISSN: 1079-5642
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB P2Y-type purine and pyrimidine nucleotide receptors play important roles in the regulation of vascular **hemostasis**. In this article, the regulation of plasminogen activator inhibitor-1 (PAI-1) expression in rat aortic smooth muscle cells (RASMCs) by adenine and **uridine** nucleotides was examd. and compared. Northern anal. revealed that RASMCs express multiple P2Y receptor subtypes, including P2Y1, P2Y2, and P2Y6. Treatment of RASMCs with UTP increased PAI-1 mRNA expression and extracellular PAI-1 protein levels by 21-fold ($P<0.001$) and 7-fold ($P<0.001$), resp. The ED50 for the effect of UTP on PAI-1 expression was .apprxeq.1 .mu.M, and its maximal effect occurred at 3 h. UDP stimulated a 5-fold increase ($P<0.005$) in PAI-1 expression. In contrast to these potent stimulatory effects of **uridine** nucleotides, ATP and 2-methylthioadenosine triphosphate (2-MeSATP) caused a small and transient increase in PAI-1 mRNA at 1 h, followed by a rapid decrease to baseline levels. ADP produced only an inhibitory effect, reducing PAI-1 mRNA levels by 63% ($P<0.05$) at 3 h. The relative nucleotide potency in stimulating PAI-1 expression is UTP>UDP>ATP=2-MeSATP, consistent with a predominant role of the P2Y6 receptor. Further studies revealed that exposure of RASMCs to either ATP or ADP for 3 h inhibited both UTP- and angiotensin II-stimulated PAI-1 expression by up to 90% ($P<0.001$). Thus, ATP induced a small and transient upregulation of PAI-1 that was followed by a strong inhibition of PAI-1 expression. These results show that extracellular adenine and **uridine** nucleotides exert potent and opposing effects on vascular PAI-1 expression.

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L23 ANSWER 1 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:549080 CAPLUS
DOCUMENT NUMBER: 121:149080
TITLE: Pyrimidine nucleotide precursors for treatment of systemic inflammation and inflammatory hepatitis
INVENTOR(S): Von Borstel, Reid Warren; Bamat, Michael Kevin; Hiltbrand, Bradley M.
PATENT ASSIGNEE(S): Pro-Neuron, Inc., USA
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 13
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9413687	A1	19940623	WO 1993-US11531	19931201
W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2150940	AA	19940623	CA 1993-2150940	19931201
AU 9457305	A1	19940704	AU 1994-57305	19931201
EP 679160	A1	19951102	EP 1994-903322	19931201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08503699	T2	19960423	JP 1993-510442	19931201
IL 107900	A1	19991222	IL 1993-107900	19931206
CN 1095268	A	19941123	CN 1993-121700	19931207
CN 1089239	B	20020821		
ZA 9309208	A	19940808	ZA 1993-9208	19931208
US 5691320	A	19971125	US 1995-465454	19950605
US 6232298	B1	20010515	US 1995-479519	19950607
AU 9878813	A1	19981008	AU 1998-78813	19980805
AU 732120	B2	20010412		
AU 9952624	A1	19991202	AU 1999-52624	19991001
CN 1309970	A	20010829	CN 2000-134481	20001129

PRIORITY APPLN. INFO.:

US 1992-987730	A	19921208
US 1993-158799		19931201
US 1987-115929	B2	19871028
US 1989-438493	B2	19890627
WO 1993-US11531	W	19931201
US 1994-266897	B3	19940701
AU 1995-29150	A3	19950630

OTHER SOURCE(S): MARPAT 121:149080

AB Pyrimidine nucleotide precursors including acyl derivs. of cytidine, **uridine**, and orotate, and **uridine** phosphorylase inhibitors, and their use in enhancing resistance to sepsis or systemic inflammation and treating or preventing inflammatory hepatitis are disclosed. Triacetyluridine and **uridine** improved survival of mice treated with killed Escherichia coli.

L23 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:205056 CAPLUS
DOCUMENT NUMBER: 124:250921
TITLE: Pyrimidine nucleotide precursors for treatment of systemic inflammation and inflammatory hepatitis
INVENTOR(S): Von Borstel, Reid W.; Bamat, Michael K.; Hiltbrand, Bradley M.
PATENT ASSIGNEE(S): Pro-Neuron, Inc., USA
SOURCE: PCT Int. Appl., 95 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 13
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9601115	A1	19960118	WO 1995-US8259	19950630
W: AU, CA, CN, JP, KR, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5691320	A	19971125	US 1995-465454	19950605
US 6232298	B1	20010515	US 1995-479519	19950607
CA 2193967	AA	19960118	CA 1995-2193967	19950630
AU 9529150	A1	19960125	AU 1995-29150	19950630
AU 712679	B2	19991111		
EP 768883	A1	19970423	EP 1995-924764	19950630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1156409	A	19970806	CN 1995-194806	19950630
JP 10505578	T2	19980602	JP 1995-503935	19950630
AU 9952624	A1	19991202	AU 1999-52624	19991001

PRIORITY APPLN. INFO.:

US 1994-266897	A	19940701
US 1987-115929	B2	19871028
US 1989-438493	B2	19890627
US 1992-987730	B2	19921208
US 1993-158799	B2	19931201
AU 1995-29150	A3	19950630
WO 1995-US8259	W	19950630

AB Pyrimidine nucleotide precursors, including acyl derivs. of cytidine, **uridine**, and orotate, and **uridine** phosphorylase inhibitors, and their use in enhancing resistance to sepsis or systemic inflammation, are disclosed. Triacetyluridine improved survival of mice treated with a LD of Salmonella typhimurium endotoxin, reduced endotoxin-caused tissue damage, reduced mortality in viral hepatitis in mice, and improved recovery from ethanol intoxication.

L23 ANSWER 1 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:549080 CAPLUS
DOCUMENT NUMBER: 121:149080
TITLE: Pyrimidine nucleotide precursors for treatment of systemic inflammation and inflammatory hepatitis
INVENTOR(S): Von Borstel, Reid Warren; Bamat, Michael Kevin; Hiltbrand, Bradley M.
PATENT ASSIGNEE(S): Pro-Neuron, Inc., USA
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 13
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9413687	A1	19940623	WO 1993-US11531	19931201
W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2150940	AA	19940623	CA 1993-2150940	19931201
AU 9457305	A1	19940704	AU 1994-57305	19931201
EP 679160	A1	19951102	EP 1994-903322	19931201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08503699	T2	19960423	JP 1993-510442	19931201
IL 107900	A1	19991222	IL 1993-107900	19931206
CN 1095268	A	19941123	CN 1993-121700	19931207
CN 1089239	B	20020821		
ZA 9309208	A	19940808	ZA 1993-9208	19931208
US 5691320	A	19971125	US 1995-465454	19950605
US 6232298	B1	20010515	US 1995-479519	19950607
AU 9878813	A1	19981008	AU 1998-78813	19980805
AU 732120	B2	20010412		
AU 9952624	A1	19991202	AU 1999-52624	19991001
CN 1309970	A	20010829	CN 2000-134481	20001129

PRIORITY APPLN. INFO.:

US 1992-987730	A	19921208
US 1993-158799		19931201
US 1987-115929	B2	19871028
US 1989-438493	B2	19890627
WO 1993-US11531	W	19931201
US 1994-266897	B3	19940701
AU 1995-29150	A3	19950630

OTHER SOURCE(S): MARPAT 121:149080

AB Pyrimidine nucleotide precursors including acyl derivs. of cytidine, **uridine**, and orotate, and **uridine** phosphorylase inhibitors, and their use in enhancing resistance to sepsis or systemic inflammation and treating or preventing inflammatory hepatitis are disclosed. Triacetyluridine and **uridine** improved survival of mice treated with killed Escherichia coli.

L23 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:205056 CAPLUS
DOCUMENT NUMBER: 124:250921
TITLE: Pyrimidine nucleotide precursors for treatment of systemic inflammation and inflammatory hepatitis
INVENTOR(S): Von Borstel, Reid W.; Bamat, Michael K.; Hiltbrand, Bradley M.
PATENT ASSIGNEE(S): Pro-Neuron, Inc., USA

SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 13
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9601115	A1	19960118	WO 1995-US8259	19950630
W: AU, CA, CN, JP, KR, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5691320	A	19971125	US 1995-465454	19950605
US 6232298	B1	20010515	US 1995-479519	19950607
CA 2193967	AA	19960118	CA 1995-2193967	19950630
AU 9529150	A1	19960125	AU 1995-29150	19950630
AU 712679	B2	19991111		
EP 768883	A1	19970423	EP 1995-924764	19950630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1156409	A	19970806	CN 1995-194806	19950630
JP 10505578	T2	19980602	JP 1995-503935	19950630
AU 9952624	A1	19991202	AU 1999-52624	19991001

PRIORITY APPLN. INFO.:

US 1994-266897	A	19940701
US 1987-115929	B2	19871028
US 1989-438493	B2	19890627
US 1992-987730	B2	19921208
US 1993-158799	B2	19931201
AU 1995-29150	A3	19950630
WO 1995-US8259	W	19950630

AB Pyrimidine nucleotide precursors, including acyl derivs. of cytidine, **uridine**, and orotate, and **uridine** phosphorylase inhibitors, and their use in enhancing resistance to sepsis or systemic inflammation, are disclosed. Triacetyluridine improved survival of mice treated with a LD of Salmonella typhimurium endotoxin, reduced endotoxin-caused tissue damage, reduced mortality in viral hepatitis in mice, and improved recovery from ethanol intoxication.

L23 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1963:444085 CAPLUS
DOCUMENT NUMBER: 59:44085
ORIGINAL REFERENCE NO.: 59:7990f-h
TITLE: Qualitative and quantitative determination of nucleotides and of phosphates involved in glycolysis [and oxidations] in normal and inflamed tissues of the feet of rats
AUTHOR(S): Kalbhen, D. A.
CORPORATE SOURCE: Friedrich Wilhelms Univ., Bonn, Germany
SOURCE: Arch. Intern. Pharmacodyn. (1963), 143, 362-76
DOCUMENT TYPE: Journal
LANGUAGE: German

AB Adult male white rats were injected in the left hind feet to produce local edema and inflammation. After 2 hrs. the rats were sacrificed and constituents of the feet were isolated and estd. by ion-exchange chromatography and spectral photometry, resp. The fractions estd. were basic phosphates, adenosine triphosphate (ATP), adenosine diphosphate (ADP), adenosine monophosphate (AMP), **uridine** and guanosine triphosphates (U/GTP), **uridine**, guanosine, and inosinemonophosphates (U/G/IMP), cytidine monophosphate (CMP), diphosphopyridine nucleotide (DPN), inorg. phosphate (PO4---), glucose 1- and glucose 6-phosphate (G1/G6P), dioxyacetone phosphate and .alpha.-glycerophosphate (DAP/.alpha.-GP), **uridine** diphosphate gluco e (UDPG), **uridine** diphosphate acetylglucosamine (UDPA),

cytidine diphosphate (CDP), fructose 1,6-diphosphate (FDP), glucose 1,6-diphosphate (GDP), 2,3-phosphoglyceric acid (2,3-PGS), and unidentified substances (X1). The total P content of the inflamed feet diminished 30%, mainly by a strong decrease in UDPG and other compds. (named). However, edema and inflammation increased the nucleotides, particularly DPN. The changes result to some extent from an increased glycolysis of the carbohydrate reserves, as well as proteolysis. A pronounced decrease in UDPG in inflammation probably resulted from an enzymic fission to yield **uridine** triphosphate and glucose and activated gluconic acid.

L23 ANSWER 4 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:489506 CAPLUS
DOCUMENT NUMBER: 115:89506
TITLE: Activities of glycogen phosphorylase and glycogen synthetase in eel neutrophils
AUTHOR(S): Park, Sung Woo; Wakabayashi, Hisatsugu
CORPORATE SOURCE: Fac. Agric., Univ. Tokyo, Tokyo, 113, Japan
SOURCE: Gyobyo Kenkyu (1991), 26(1), 35-43
CODEN: GYKEDT; ISSN: 0388-788X
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB The existence of glycogenphosphorylase and glycogen synthetase was histochem. demonstrated in the neutrophils of eel (Anguilla japonica) under inflammatory condition by the reaction of polysaccharide derived from glucose-1-phosphate or **uridine** diphosphate glucose with iodine and PAS, resp. The enzyme activities were also detd. in the peripheral and pronephros neutrophils obtained from the fish after an i.p. injection of formalin-killed Edwardsiella tarda or physiol. saline. The activity of the glycogen phosphorylase was measured by the amt. of released inorg. phosphate from glucose-1-phosphate, and that of the glycogen synthetase by the amt. of the released **uridine** diphosphate from **uridine** diphosphate glucose. In the pronephros neutrophils from the fish injected with formalin-killed E. tarda, the reaction of glycogen phosphorylase became prominent between 24 and 48 h after injection, while that of glycogen synthetase increased conspicuously from 3 h. There were no significant differences in the reactions of 2 enzymes between the control fish injected with physiol. saline and normal fish. The activities of glycogen phosphorylase and glycogen synthetase in the peripheral neutrophils did not differ between the bacteria-injected and control fish, but those, esp. the D-form of glycogen synthetase, in the pronephros neutrophils were greatly increased in the bacteria-injected fish. From the results of histochem. reactions and enzyme activities of these 2 enzymes, it is suggested that the increase in glycogen contents of neutrophils under inflammatory condition resulted from the activation of the D-form of glycogen synthetase which had been achieved in the pronephron before being emigrated into the peripheral blood.

L23 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:522037 CAPLUS
DOCUMENT NUMBER: 137:74399
TITLE: Method for the prediction of the risk potential for cancerous diseases and inflammatory intestinal diseases by testing DNA for the presence of polymorphic UGT1A7 alleles
INVENTOR(S): Manns, Michael; Strassburg, Christian
PATENT ASSIGNEE(S): Medizinische Hochschule Hannover, Germany
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002053770	A2	20020711	WO 2002-DE3	20020103

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10100238	A1	20020822	DE 2001-10100238	20010105

PRIORITY APPLN. INFO.: DE 2001-10100238 A 20010105

AB The invention relates to a method for the prediction of the risk potential and/or diagnosis of cancerous diseases or inflammatory intestinal diseases, whereby a DNA sample is tested for the presence of polymorphic UGT1A7 allele, namely UGT1A7*2, UGT1A7*3, and UGT1A7*4. A pos. result for a mutation is a pos. indication of a sensitivity to cancerous diseases. A prediction of sensitivity to an inflammatory intestinal disease can similarly be made. A PCR amplification of the exon 1, by means of the DNA sample with subsequent sequence anal. is carried out in the method and the detd. sequence compared with that of the wild type and the polymorphic allele. The presence or lack of mutations N129K, R131K and W208R, and silent mutation CCC to CCA in codon 11 were monitored by means of sequencing of corresponding cDNAs using automated fluorescent dye sequencing. The test arrangement for said method requires genetic detection reagents, namely the required primer or cDNAs, on a stationary support in a pre-prepd. arrangement or sequence for reading off the results. The recombinant UGT1A7 enzymes are also used for therapeutic purposes.

L23 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:	1984:416949 CAPLUS
DOCUMENT NUMBER:	101:16949
TITLE:	Functional resistance of inflammatory macrophages to methotrexate in vitro
AUTHOR(S):	Zeller, Janice M.; Gudewicz, Paul W.
CORPORATE SOURCE:	Med. Cent., Univ. Illinois, Chicago, IL, 60612, USA
SOURCE:	J. Leukocyte Biol. (1984), 35(5), 475-87 CODEN: JLBIE7; ISSN: 0741-5400
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB The effect of high and low therapeutic doses of methotrexate (MTX) [59-05-2] on macrophage metab. and function in vitro was studied. Monolayers of elicited rate peritoneal macrophages (PM) were exposed to a wide range of MTX concns. (10-8-10-3 M for 24 or 48 h and macrophage RNA and protein metab. were evaluated by the incorporation of [3H]5-**uridine** and [14C]1-leucine, resp., into trichloroacetic acid (TCA)-precipitable material. Macrophage functional activity was examd. by measuring the uptake of [14C]Pseudomonas aeruginosa to assess phagocytosis and the release of 51Cr from antibody-coated [51Cr]sheep red blood cells (SRBCe to assess antibody-dependent cell-mediated cytotoxicity). Following a 24-h incubation with 10-3 M MTX, incorporation of [3H]5-**uridine** into PM monolayers was enhanced 79% when compared to control monolayers. Washout studies revealed that the stimulation of **uridine** incorporation was no longer obsd. by 24 h following the removal of MTX from the culture medium. Incubation with 10-3 M MTX for 48 h returned **uridine** incorporation to control levels, although

leucine incorporation into protein was reduced by 22%. The depression in leucine incorporation in the presence of 10-3 M MTX was not reversed after the removal of MTX from the culture medium. Uptake of [14C]P. aeruginosa was not altered following a 24- or 48-h incubation with either 10-7 M or 10-3 M MTX. Similarly, [51Cr]SRBC cytolysis was not affected by a 2-h preincubation with and continuous exposure to between 10-8 M and 10-3 M MTX. Incubation of inflammatory macrophages with clin. high doses of MTX can alter macrophage RNA and protein metab. without producing demonstratable changes in macrophage functional activity.

L23 ANSWER 7 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:73042 CAPLUS
DOCUMENT NUMBER: 92:73042
TITLE: Autoradiographic study of protein synthesis by peripheral blood cells and cells of the inflammation focus of Lymnaea stagnalis
AUTHOR(S): Lange, M.; Potapina, N. V.
CORPORATE SOURCE: Mosk. Gos. Univ., Moscow, USSR
SOURCE: Biol. Nauki (Moscow) (1979), (10), 40-3
CODEN: BINKBT; ISSN: 0303-4119
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB When L. stagnalis amebocytes from blood were incubated in vitro with labeled precursors, 91% of the cells incorporated **uridine**-3H, and 96% and 99% of the cells incorporated leucine-3H and proline-3H, resp. Autoradiog. anal. indicated .apprx.5-100 Ag grains over cells incubated with **uridine**-3H, 10-100 Ag grains over cells incubated with leucine-3H, and 10-80 Ag grains over cells incubated with proline-3H. In vivo, 99% of the amebocytes incorporated proline-3H. When amebocytes, present on a glass slide which had been inserted into the L. stagnalis foot tissue causing an inflammatory response, were incubated with proline-3H, only 26% of the cells exhibited radioactivity. During the 1st stages of the inflammatory response to catgut stitches in the foot, only 18% of the amebocytes in the inflammation focus incorporated proline-3H, whereas 48% of the fibroblast-like cells incorporated proline-3H. Some 22% and 56% of the amebocytes were labeled on the 3rd and 5th days, resp., of the inflammation, whereas 58% and 78%, resp., of the fibroblast-like cells were labeled. Evidently, many of the amebocytes in the circulating blood are not fully differentiated (as indicated by active protein synthesis); however, the amebocytes migrating into inflammation foci represent more mature cells (as indicated by the low proportion of cells synthesizing proteins). During later stages of inflammation, protein synthesis is activated, presumably because of the induction of collagen synthesis.

L23 ANSWER 8 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:53559 CAPLUS
DOCUMENT NUMBER: 134:236175
TITLE: The Eosinophil Peroxidase-Hydrogen Peroxide-Bromide System of Human Eosinophils Generates 5-Bromouracil, a Mutagenic Thymine Analogue
AUTHOR(S): Henderson, Jeffrey P.; Byun, Jaeman; Mueller, Dianne M.; Heinecke, Jay W.
CORPORATE SOURCE: Department of Medicine and Department of Molecular Biology and Pharmacology, Washington University School of Medicine, St. Louis, MO, 63110, USA
SOURCE: Biochemistry (2001), 40(7), 2052-2059
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Eosinophils use eosinophil peroxidase, hydrogen peroxide (H2O2), and

bromide ion (Br-) to generate hypobromous acid (HOBr), a brominating intermediate. This potent oxidant may play a role in host defenses against invading parasites and eosinophil-mediated tissue damage. In this study, we explore the possibility that HOBr generated by eosinophil peroxidase might oxidize nucleic acids. When we exposed uracil, **uridine**, or deoxyuridine to reagent HOBr, each reaction mixt. yielded a single major oxidn. product that comigrated on reversed-phase HPLC with the corresponding authentic brominated pyrimidine. The eosinophil peroxidase-H2O2-Br- system also converted uracil into a single major oxidn. product, and the yield was near-quant. Mass spectrometry, HPLC, UV-visible spectroscopy, and NMR spectroscopy identified the product as 5-bromouracil. Eosinophil peroxidase required H2O2 and Br- to produce 5-bromouracil, implicating HOBr as an intermediate in the reaction. Primary and secondary bromamines also brominated uracil, suggesting that long-lived bromamines also might be physiol. relevant brominating intermediates. Human eosinophils used the eosinophil peroxidase-H2O2-Br- system to oxidize uracil. The product was identified as 5-bromouracil by mass spectrometry, HPLC, and UV-visible spectroscopy. Collectively, these results indicate that HOBr generated by eosinophil peroxidase oxidizes uracil to 5-bromouracil. Thymidine phosphorylase, a pyrimidine salvage enzyme, transforms 5-bromouracil to 5-bromodeoxyuridine, a mutagenic analog of thymidine. These findings raise the possibility that halogenated nucleobases generated by eosinophil peroxidase exert cytotoxic and mutagenic effects at eosinophil-rich sites of inflammation.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:133178 CAPLUS

DOCUMENT NUMBER: 137:77742

TITLE: Immediate and delayed leukocyte apoptosis in two models of peritonitis

AUTHOR(S): Kuhn, John F.; Godshall, Christopher J.; Scott, Melanie J.; Franklin, Glen A.; Rowe, Stephen A.; Peyton, James C.; Cheadle, William G.

CORPORATE SOURCE: Veterans Affairs Medical Center and the Department of Surgery, University of Louisville School of Medicine, Louisville, KY, 40292, USA

SOURCE: Inflammation (New York, NY, United States) (2001), 25(6), 389-397
CODEN: INFLD4; ISSN: 0360-3997

PUBLISHER: Kluwer Academic/Plenum Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Leukocyte apoptosis is an energy-dependent process that facilitates resoln. of the cellular inflammatory response. Levels of apoptosis can be accelerated or inhibited after exposure to various stimuli. To compare apoptosis in transmigrated leukocytes, two models of peritonitis in mice were used that both cause leukocyte influx into the peritoneal cavity: (1) i.p. thioglycolate administration producing a sterile peritonitis and (2) cecal ligation and puncture (CLP) producing a polymicrobial bacterial peritonitis. Samples of blood and peritoneal exudate cells (PEC) were collected at multiple time points after induction of peritonitis. Leukocytes were either fixed immediately to det. an immediate apoptosis level or cultured for 24 h to det. a delayed apoptosis level. Apoptosis was assessed using terminal **uridine**-triphosphate nick-end labeling (TUNEL) assay, flow cytometry, and confocal microscopy. Leukocyte influx into the peritoneal cavity was confirmed in both models. At all time points, and in both models, there was increased immediate apoptosis in PEC compared with unmanipulated controls and this increase was maximal in CLP after 18 h, although it appeared to remain at a stable level in the sterile peritonitis model by 3 h. There was also an increase

in PEC delayed apoptosis at early time points in both models, again maximal at 18 h for CLP, with the levels being significantly higher than the thioglycolate model at 6 h and 18 h. The mice had a relative peripheral neutropenia at 6 h after CLP, but not post thioglycolate injection, and this persisted until 42 h. Lung and liver MPO levels were elevated in CLP but did not increase after thioglycolate. There was no increase in immediate peripheral leukocyte apoptosis in either model, but an increase in delayed peripheral leukocyte apoptosis was obsd. by 18 h in both models. Peripheral leukocyte CD11b expression, which is a marker of activation, was also persistently elevated in the CLP model, but not in sterile peritonitis. In conclusion, CLP is a more potent stimulus for apoptosis of leukocytes than their migration to the site of inflammation alone, as occurs in the thioglycolate model. Blood leukocyte apoptosis also appears not to be dependent on CD11b expression, and therefore activation status.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

23 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1967:482222 CAPLUS
DOCUMENT NUMBER: 67:82222
TITLE: Potassium hydrogen sulfite addition product of 6-L-(1-cytosinyl)- and (1-uracilyl)-5-hydroxy-p-dioxane-2-D-carboxyaldehyde
INVENTOR(S): Alburn, Harvey E.; Dvonch, William
PATENT ASSIGNEE(S): American Home Products Corp.
SOURCE: U.S., 1 p.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3317535		19670502	US	19650219

AB Adenosine (5 g.) was oxidized with 206 ml. 0.1M periodic acid for 0.5 hr. at 25.degree. in the dark and the soln. passed over a Dowex-lacetate column to give .alpha.-L-(9-adeninyl)-.alpha.'-D-(hydroxymethyl)diglycolic aldehyde. Cytidine and **uridine**, resp., were oxidized with periodic acid and the oxidn. products (about 0.01 mole) dissolved in 100 ml. H2O with about 0.005 mole K metabisulfite. The resulting soln. was freeze-dried to give 6-L-(1-cytosinyl)-5-hydroxy-p-dioxane-2-D-carboxaldehyde-KHSO3 addn. product and 6-L-(1-uracilyl)-5-hydroxy-p-dioxane-2-D-carboxaldehyde-K-HSO3 addn. product. 5'-Adenylic acid (14.2 g.) was oxidized with 450 ml. 0.1M periodic acid for 1 hr. at 25.degree. in the dark. The soln. was passed over a column of Dowex-lacetate to give 8.4 g. .alpha.-L-(9-adeninyl)-.alpha.'-D-(hydroxymethyl)diglycolic aldehyde phosphate ester. These compds. have antiinflammatory activity when administered parenterally.

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Printer: cm1_2e12_gbkvptr

Summary

Document	Pages	Printed	Missed
US005607925	26	26	0
Total (1)	26	26	0